UTAH

THE LAND OF BLOSSOMING VALLEYS

GEORGE WHARTON JAMES

THE "SEE AMERICA FIRST" SERIES

LIBRARY
Brigham Young University

26188

Digitized by the Internet Archive
in 2009 with funding from
Brigham Young University

http://www.archive.org/details/utahlandofblosso00byujame

UTAH

THE LAND OF BLOSSOMING VALLEYS

"SEE AMERICA FIRST" SERIES

Each in one volume, decorative cover, profusely illustrated

CALIFORNIA, ROMANTIC AND BEAUTIFUL
By George Wharton James $6.00

NEW MEXICO: The Land of the Delight Makers
By George Wharton James $6.00

UTAH, The Land of Blossoming Valleys
By George Wharton James $6.00

THREE WONDERLANDS OF THE AMERICAN WEST
By Thomas D. Murphy $6.00

A WONDERLAND OF THE EAST: The Mountain and Lake Region of New England and Eastern New York
By William Copeman Kitchin, Ph. D. $6.00

ON SUNSET HIGHWAYS (California)
By Thomas D. Murphy $6.00

TEXAS, THE MARVELLOUS
By Nevin O. Winter $6.00

ARIZONA, THE WONDERLAND
By George Wharton James $6.00

COLORADO: THE QUEEN JEWEL OF THE ROCKIES
By Mae Lacy Baggs $6.00

OREGON, THE PICTURESQUE
By Thomas D. Murphy $6.00

FLORIDA, THE LAND OF ENCHANTMENT
By Nevin O. Winter $6.00

SUNSET CANADA (British Columbia and Beyond)
By Archie Bell $6.00

ALASKA, OUR BEAUTIFUL NORTHLAND OF OPPORTUNITY
By Agnes Rush Burr $6.00

VIRGINIA: THE OLD DOMINION. As seen from its Colonial waterway, the Historic River James
By Frank and Cortelle Hutchins $5.00

A number of additional volumes are in preparation, including **Maine, Nevada, Georgia, The Great Lakes, Louisiana,** etc., and the "See America First" Series will eventually include the whole of the North American Continent.

THE PAGE COMPANY

53 Beacon Street Boston, Mass.

826
.J3

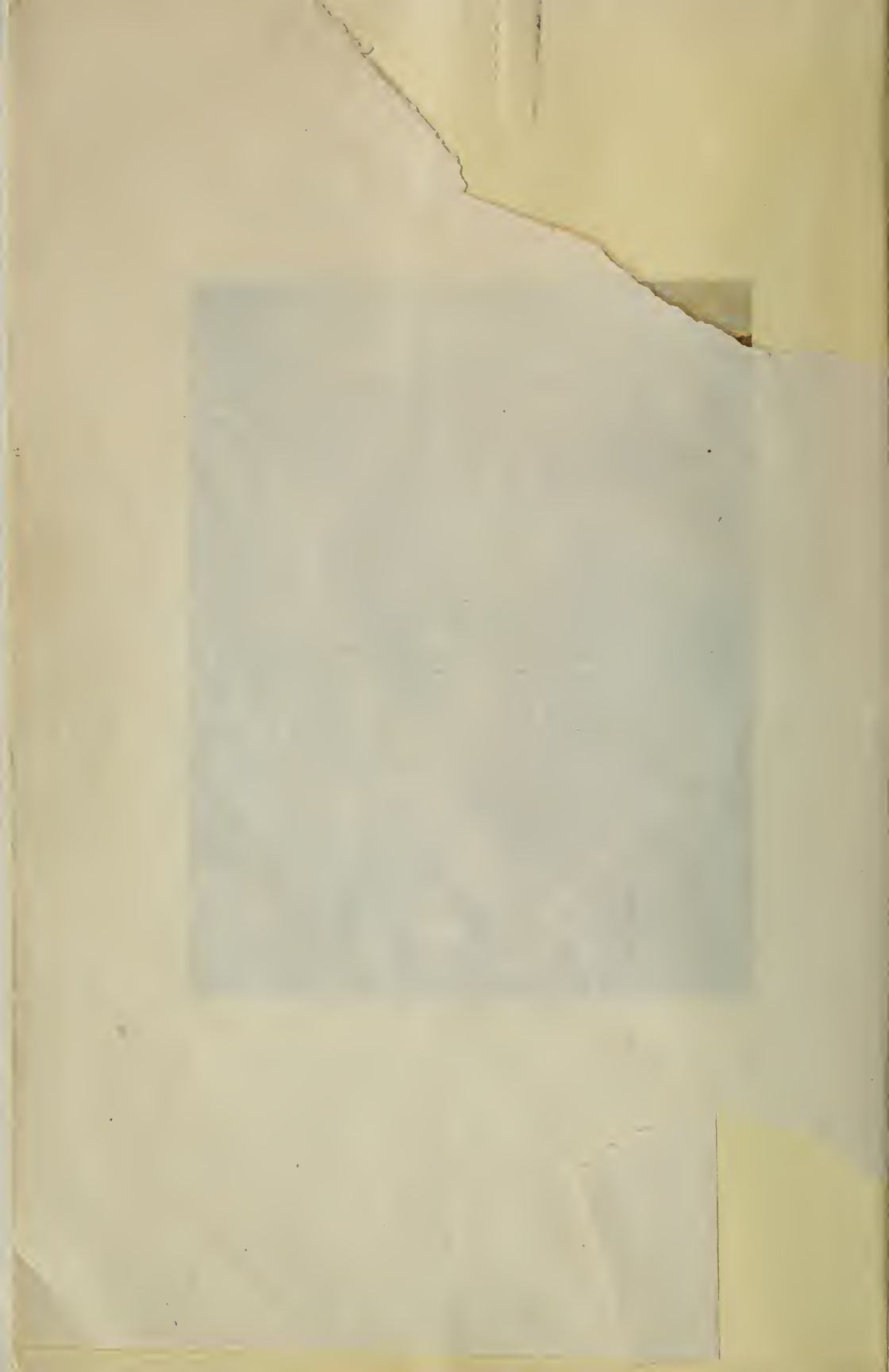
UT

THE LAND

Zion Canyon

Reproduced from a painting by Orion Putnam, through the courtesy of the artist

(See page 180)



F
826
.J3

THE "SEE AMERICA FIRST" SERIES

UTAH

THE LAND OF BLOSSOMING VALLEYS

The Story of its Desert Wastes, of its Huge and Fantastic Rock Formations, and of its Fertile Gardens in the Sheltered Valleys; a Survey of its Rapidly Developing Industries; an Account of the Origin, Development, and Beliefs of the Mormon Church; and Chapters on the Flora and Fauna, and on the Scenic Wonders that are a Heritage of all Americans.

BY
GEORGE WHARTON JAMES
AUTHOR OF
"New Mexico, The Land of the Delight Makers,"
"California, Romantic and Beautiful," "Arizona,
The Wonderland," etc.

With a map and fifty-six plates
of which eight are in color

2615

THE PAGE COMPANY
BOSTON ❧ MDCCCCXXII

4

Copyright, 1922, by
EDITH E. FARNSWORTH

All rights reserved

Made in U. S. A.

First Impression, April, 1922

THE COLONIAL PRESS
C. H. SIMONDS CO., BOSTON, U. S. A.

TO THE BRAVE PIONEERS

Women as well as Men

WHO DID THEIR PART IN THE BUILDING OF

THE UTAH OF TODAY, I CORDIALLY

DEDICATE THESE PAGES

With High Esteem for Their Rugged Virtues and

Profound Respect for Their Sturdy Qualities

BY WAY OF FOREWORD

This is the fourth volume in the "See America First" series that it has been my pleasure and privilege to prepare. I trust it will be found a worthy successor to *California, Romantic and Beautiful; Arizona, the Wonderland;* and *New Mexico, the Land of the Delight-makers.* From the historic and scenic standpoints, Utah has no apologies to offer to any of the sisterhood of western states. While her modern history begins later than that of New Mexico and Arizona, it is equally, if not even more dramatic and moves with a swift intensity that is powerfully thrilling. The journey of Coronado from Culiacan in 1540 to the discovery of the "Seven Cities of Cibola" was not as dramatic as that of the humbler march of the cast-out Mormons from dismantled and ruined Nauvoo, in Illinois, over the weary miles of the plains and mountains to the founding of their "City of Zion" in the then almost unknown West.

The world has seen many and wonderful migrations. One of the most important of these, in American history, was when the Pilgrims left England and settled in New England. They had one chief object in leaving home, position, work and friends behind. They came to a new country in order that they might have "freedom to worship God!" Yet these same people in a very few years, and their descendants after them, showed the frailty of their human nature by persecuting those who differed from them in matters of religion. It was this same desire for religious freedom that sent forth the Mormons to their new home.

How important to the nation at large the forced migration of the Mormons will be considered in the future it is not for me to forecast, but its importance to the State of Utah is evident. Without it there would have been no Utah as we know it today. Hence it will be apparent that no account of Utah can be written with any pretention to comprehensiveness that does not fully take into account Mormonism and all its chief factors, or at least those that have influenced the making of the State in the beginning and its shaping up to the present day.

Leading among these factors, necessarily, are Joseph Smith, the founder of the Mormon system of religious belief, Brigham Young, his energetic and statesmanlike successor, and the peculiar tenets of the Mormon religion that so won the hearts of its followers that they were willing to be led, through untold hardships, to their land of refuge in the far-away west.

It is a self-evident proposition that without Brigham Young the Utah we know would not exist, and it is equally certain that without Joseph Smith and his Book of Mormon, his "revelations" and church organization, there would have been no Brigham Young; nor would there have been a church of a "peculiar people" ready to be led by him into the unknown Land of Zion.

When, therefore, I avowed my intention of writing a book on Utah and treating the subject in this fashion I was not surprised that various "cautions," "suggestions" and "expressions of doubt" came to me, setting forth that any truthful, unprejudiced and full statement of Mormonism would be regarded by many as propaganda, and that, furthermore, I must fully discuss the unpleasant subject of polygamy. It was made clear to me that to not a few of our citizens, Utah, Mormonism and polygamy were almost synonymous terms. One quoted to me the following words from a recent writer on Mormonism and asked whether I was able to guar-

antee that I could be neutral in presenting the subject in its various phases:

"Mormonism is a system of large things. It is large in claims, large in efforts, large in results, large in reputation and very large in importance if judged by the opposition it has evoked. Like the man through whom it had its origin it possesses an individuality that is intense and vital; it repels and attracts with equal force. One finds difficulty in maintaining a perfectly neutral position in treatment of its claims and history."

There was no hesitancy in my reply. I *could* or would endeavor to be perfectly neutral, but with a further purpose, which I wish my readers most distinctly to understand. After a reading of thousands of pages written on Utah and Mormonism, I found so much of fierce controversy, either for or against the Mormon system and its leaders, that I determined in this volume to avoid argument, to let Mormonism speak for itself as much as possible and let my readers form their own conclusions. Hence in reading the following chapters dealing with Mormonism, its prophet, its organization, its achievements, etc., it must clearly be understood that I have sought to present these subjects from the Mormon standpoint. Every honest reader should be willing to seek to know the Mormons' own explanations of the origin of their religion, the strange features of their belief and the reasons for the great antagonisms that, more particularly in the past, have swept over them. I have sought to be impartially honest in my presentations. Occasionally, however, I have not hesitated to express my opinion and, while I am not a Mormon, while I do not accept for myself the "Special Revelations" that came through the Mormon prophet, Joseph Smith, while I am not and never have been a believer in, or advocate of polygamy, while, personally, I think the Mormon religion is a material one in some respects, while I do not like its atti-

tude toward women, making them subservient to men both here and in the Kingdom of Heaven; and while personally, I feel that Mormonism is but another sect added to the many that already exist in the world, instead of being the one sole, only, divinely appointed church, these are my personal opinions and should have nothing whatever to do with my presentation of what *Mormonism is to the Mormons.* Should any of my statements be regarded by some as defence of Mormonism let it clearly be understood that such is not my purpose. Let it stand upon its own merits. Let it prove its own justification or otherwise. The one sole responsibility with which my conscience is charged is that I give a truthful and reasonably complete presentation of Mormonism from the Mormon standpoint without prejudice or bias. And who is to be the final judge?

"Now, who shall arbitrate?
Ten men love what I hate,
Shun what I follow, slight what I receive;
Ten, who in ears and eyes
Match me; we all surmise,
They this thing, and I that; whom shall my soul believe?"

It is my fate, as it is that of all men and women, to live in this world of different beliefs, to have to meet with people holding entirely contrary opinions to my own. Is it not wise, therefore, and right, that I seek to live in harmony and peace with them as far as is possible to me; and, while I cannot accept their beliefs, to be as kindly disposed towards them and as scrupulously honest and just in seeing the good in them as I can. This is my attitude and endeavor.

It is not my purpose to enter into any analysis or discussion of mooted and unsettled questions. Who can determine the truth of a claim of inspiration? Were

Joseph Smith and Brigham Young and their co-laborers impostors? Personally I am not concerned about answering the question, any more than I am about determining whether St. Francis of Assisi, St. Anthony of Padua, John Wesley, William Penn, Mary Baker Eddy, Annie Besant, Katherine Tingley, or Ellen G. White were or are impostors. Christ gave, in His day, a pretty good standard by which to judge the claims of men and women: "By their fruits shall ye know them." I judge St. Francis, Wesley, and the rest by their fruits, and in looking at the Utah of today I find fruits of happiness, of state stability, of genuine and practical religion and of real progress.

But regardless of Mormonism, Utah as a country is well worthy the careful attention of all thoughtful Americans. Geologically it is one of the most interesting states in the Union,— its Great Salt Lake, with its prehistoric terraces; its relation to the vast prehistoric inland sea; its wonderful fossil deposits of gigantic dinosaurs; its San Rafael Swell; its Hurricane Fault; its glorious and spectacular towers of the Rio Virgen; its Zion National Park; its Bryce Canyon; its South-Eastern desert; its colossal Natural Bridges; its canyons, tributary to the Grand Canyon of the Colorado; its stupendous and majestic mountain chains, scored with centuries of glaciation, seamed with rugged, picturesque, and alluring canyons, and dotted here and there with mountain lakes — eyes of clearest crystal; together with its unique mines — these amply, though the list is far from complete, justify my assertion.

Climatically, also, it is remarkable. While a large part of its area is fully 4,000 feet above sea-level, and therefore partakes of an inland plateau character, its mountains tower to over 12,000 feet into the clear blue, where the coldest temperatures are found, and yet on the south-eastern and south-western deserts the same kind of

climate and temperature may be found as reign in the Mohave and Colorado deserts of Southern California.

Then, too, as the sub-title suggests, it is a Land of Blossoming Valleys. Brigham Young had the prophecies as to the desert blossoming as the rose well before him during the whole of his career, and one after another he saw the Valleys of the Jordan, the Provo, the Weber, the Ogden, the Bear, the Sevier and the Virgin occupied by his indefatigable bands of pioneers, and there speedily sprang into existence great fields of waving grain, wheat, oats, barley, and rye, green areas of alfalfa, widely flung acres of sugar beets, mile after mile of potatoes, sorghum, corn, milo-maize, cabbages, squash, pumpkins, melons and the like, while in every direction thousands of healthy milk-cows and herds of beef-cattle, horses and mules waded shoulder deep in richest pasture, and immense flocks of sheep and goats cropped the verdure and browse of the foothills. Then the orchards! Who that has seen the heavily-laden peach, apricot and especially the cherry trees of Utah can ever forget them,— fruit, rich and luscious, fit for the gods, in appearance, flavor, and the satisfaction they give. Apples, pears, quinces, and plums, together with raspberries, blackberries, and gooseberries also thrive abundantly throughout a large part of the state, while in the oases found in the desert region of the south the fig, pomegranate, and other sub-tropical fruits grow with a richness and profusion not surpassed anywhere.

But it must not be thought that all the development of the state has been done alone by the Mormons. While it is freely conceded that it was Brigham Young's purpose to keep Gentiles — as all outside the pale of the Mormon Church are called — out of the state, and while mining was frowned upon for many years,— as experience had shown that a successful mining-camp of any

kind always attracted the dregs of humankind,— Gentiles *did* drift into the state, and men, even Mormons, *would* engage in mining. Then, too, a few who had "apostatized," or relinquished the faith, insisted upon remaining in the land they had learned to love, and these soon took their part in the general work of upbuilding and progress. Then, when the great transcontinental railway system was completed by the joining of the Union and Central Pacific lines, which crossed northern Utah, that in itself threw open the gates, and from that time on Gentiles mixed freely with Mormons, settled and engaged in their various businesses, trades and avocations as they have ever done in the freest countries in the world. And that is the state of affairs in Salt Lake City today. No one questions that it took some time to attain the final adjustments: but what of that? Are other cities free from cliques, factions and interests or groups that seek to dominate? And it may as well be confessed that, in many of the smaller towns and villages of the state, the amalgamation of Mormon and Gentile is not yet complete. The Mormons are in the majority, and, naturally, might be expected to control. Yet it is a well-known fact that a disproportionately large share of public offices for some time have been and are held by non-members of the church. There can be, therefore, no justice in the oft-made assertion that official Mormondom uses its power and influence to control local politics. And even were it so, is it not exactly what the other side would do were it in power? It is only when a deep spirit of civic liberty is developed that our citizenship can rise above "party politics" and a practical belief in the political axiom that "to the victors belong the spoils." No political party that has yet existed either in Utah or anywhere in the United States can throw a stone at the Mormons in this regard.

Referring to these country towns and settlements: it is astonishing to one who does not understand how they came into existence, to find how marvelously different, how individualistic, they are. This came from the deliberate planning of the great state-builder, Brigham Young. As converts came pouring into Zion from all over Europe, he largely segregated them into nationalities or types, with, of course, carefully chosen men of his own training, where possible, for leaders, and sent the Swedes into one valley, the Norwegians into another, and the French, Swiss, English and Dutch — each of his kind to his own place. No hard and fast rule, however, obtained in this matter, consequently many immigrants settled when, where and how they would according to their own sweet will, yet the principle will be found exemplified in many towns.

In the preparation of this work I have received a great deal of kindly help from a variety of sources, Mormon and non-Mormon. The library of the Church of Latter-Day Saints was freely placed at my disposal, with its hundreds of books antagonistic to Mormonism, as well as those favoring it. The professors of the State University and other educational institutions, the State Officials, the District Forester of the U. S. Forest Service, the Manager of the Strawberry Project of the U. S. Reclamation Service, were all generous and kind in their assistance. Especially, however, do I wish to record my thanks to Dr. Charles Griffen Plummer, about whom I have written more fully in a chapter devoted to his work among the boys and birds of Utah, and to Leroi C. Snow, son of former president Lorenzo Snow, of the Mormon Church, who added to his helpfulness in seeking to put me in touch with all who could aid me in my work, a sympathetic tenderness, when I was ill and suffering, that could not have been surpassed by one of my own sons.

If in this volume I have helped remove any unfounded

prejudice, and at the same time have given a fairly comprehensive view of the Utah of today, then indeed shall I add gratitude to the pleasure that I have had in writing it.

Salt Lake City, July, 1921.

CONTENTS

CHAPTER		PAGE
	By Way of Foreword	v
I.	General Glimpses of the Land	1
II.	The Ancient Inhabitants of Utah	31
III.	Joseph Smith and the Origin of Mormonism	47
IV.	Brigham Young, Religionist and Statesman	82
V.	Out of Great Tribulation	98
VI.	Building a State	107
VII.	Polygamy in Utah	119
VIII.	The Salt Lake Theater	135
IX.	Education in Utah	146
X.	The Geology of Utah	155
XI.	The Opalescent Valley—Zion National Park	169
XII.	Bryce Canyon, an Amphitheater of Erosion	193
XIII.	Modern Irrigation and the Mormons	195
XIV.	Mines and the Ore Deposits of Utah	206
XV.	The National Forests of Utah	216
XVI.	The Colossal Natural Bridges of Utah	235
XVII.	Bird Life in Utah	246
XVIII.	A Western Physician-Naturalist	260
XIX.	Utah's Influence Upon Literature	269
XX.	The Artists and Sculptors of Utah	288
XXI.	Salt Lake City	308
XXII.	Railways in Utah	324

CHAPTER PAGE

Appendices:

I. The Organization of the Mormon Church 328

II. The Peculiar Doctrines of Mormonism 343

III. The Mormon Missionary System . . 352

Bibliography 359

Index 361

LIST OF ILLUSTRATIONS

PAGE

Zion Canyon (*In full color*) (*See page 186*) *Frontispiece*

MAP OF UTAH 1

Mount Timpanogos 4

Salt Beds, Great Salt Lake 7

Saltair Beach and Pavilion, Great Salt Lake . 9

Emigration Canyon 11

Black Rock, Great Salt Lake 15

Mormon Temple, St. George 26

Cliff Dwellings, La Sal National Forest . . 33

Joseph Smith, Jr., the Founder of Mormonism (*In full color*) 47

John Taylor, Third President of the Mormon Church 78

Brigham Young, Second President of the Mormon Church 84

"The Salt Lake Trail" (*In full color*) . . . 101

Old State House, Fillmore 109

Lorenzo Snow, Fifth President of the Mormon Church 123

Wilford Woodruff, Fourth President of the Mormon Church 131

The Old Salt Lake Theater, Salt Lake City . 145

State Agricultural College, Logan 147

East Side High School, Salt Lake City . . . 151

University of Utah, Salt Lake City . . . 153

Wasatch Mountains from Liberty Park, Salt Lake City 156

A Glacial Lake in the Wasatch Range (*In full color*) 158

PAGE

Entrance to Zion Canyon 169
East Temple, Zion Canyon 175
The Mountain of the Sun, Zion Canyon . . 177
The Guardian, Looking Down Zion Canyon . . 183
The Great White Throne, Zion Canyon . . 186
Carvings of the Ages, Bryce Canyon . . . 193
Laying Irrigation Pipes, Powell National Forest 201
Sugar Beet Field 204
Camping in the Cache National Forest . . . 218
A Forest Ranger's Corral in a Utah National Forest 221
Temple of Latter Day Saints, Logan . . . 224
Old Mill on City Creek, Near Salt Lake City . 226
Stand of Engelmann Spruce, Uinta National Forest 229
Temples of the Gods, Bryce Canyon 231
Trophies from Fish Lake 235
Caroline, or Katchina, Natural Bridge . . . 239
The Augusta, or Shipapu, Colossal Natural Bridge (*In full color*) 242
Pelicans on Hat Island, in Great Salt Lake . 255
Young Heron, Great Salt Lake 257
Sea-Gulls on Hat Island, in Great Salt Lake . 267
Old White House, First Residence of Brigham Young, Salt Lake City 277
Monument Park, in Southeastern Utah (*In full color*) 289
Cyrus E. Dallin, Sculptor 299
"Medicine Man" — By Cyrus E. Dallin . . 304
"Pool of Enchantment" — By Melvin Earl Cummings 306
City and County Building, Salt Lake City . . 310
The Temple Grounds, Salt Lake City (*In full color*) 313
The Sea-Gull Monument, in the Temple Grounds, Salt Lake City 317

PAGE

Eagle Gate, with the State Capitol in the Background, Salt Lake City 319
Utah State Capitol Building, Salt Lake City . 321
Hotel Utah, Salt Lake City 323
General View of Salt Lake City (*In full color*) . 327
Heber J. Grant, Seventh and Living President of the Mormon Church 332
Joseph F. Smith, Sixth President of the Mormon Church 348
Mormon Temple, Manti 353

UTAH, THE LAND OF BLOSSOMING VALLEYS

CHAPTER I

GENERAL GLIMPSES OF THE LAND

It will be well before we attempt a study of the history of Utah to take a general survey of the state, and also indulge in some specific verbal pictures which will give a good idea of what is contained within its boundaries. First, the general overlook, for the condensed facts of which I am indebted to *The Ore Deposits of Utah,* published by the U. S. Geological Survey. The specific descriptions are from various writers and will thus give a taste of their literary quality, as well as reveal the impressions the country made upon them.

From our general reading and travel we know that Utah is a land of high mountains, deep valleys, far-stretching high plateaus, fertile meadows, sandy, desolate deserts, rich forests, bare, wind-swept areas of solid rock, where tower monuments more striking and wonderful than all the other natural rock-carvings of the rest of the United States combined, great salt lakes, exquisite fresh water lakes, streams that flow through miles and miles of farms and orchards, and other streams that flow through miles of shut-in canyons, where no eye ever gazes save those of a curious cowboy or a searching Indian. Some of its canyons are the most beautiful the

eye of man ever gazed upon; some of its wind-swept areas the most desolate. In the "Land of the Standing Rocks" one is awed by the carving forces of the sand-laden wind, and in the "Land of the Colossal Natural Bridges" an equal sense of awe comes from the majesty of the structures, and a realization of the forces that have created them.

Looking over the state as a whole, one soon realizes that Utah lies both in the Plateau and the Great Basin provinces of the Cordilleran region. It therefore possesses a great variety of geographic and climatic features. Altitudes and temperatures vary considerably, from semi-frigid to semi-tropical, and the rainfall is equally varied. These conditions naturally have exerted a marked influence in the development of the industries of the state.

Draw a curved line of gentle westward concavity from about the middle of the northern boundary to the south-western corner of Utah and you have the most important physiographic frontier of the State. The country west of this line is almost entirely within the Great Basin, while the country on the other side is largely in the Plateau province, so called by Major J. W. Powell, though it is not all plateau by any means.

The Great Basin has no outlet to the sea, and is topographically characterized by the alternation of relatively broad, coalescing desert valleys with relatively narrow mountain ranges of general north-south trend. Except the Raft River Mountains, which lie on the northern border, and have an irregular east-west trend, the other mountains of western Utah are typical in trend and form. They rise like islands and peninsulas above a desert floor, large parts of which appear almost as level as a sea. The broadest open portion of this surface, the Great Salt Lake Desert, is one of the most extensive arid plains in the whole Great Basin, even as the Great Salt

Lake is by far the largest of the saline lakes in which the rivers of that province generally terminate.

Despite the apparent flatness of the desert floor, its elevation ranges from about 4,300 feet at the shore of Salt Lake to nearly 6,000 feet at the head of Escalante Desert. It rises gradually southward as a whole, and the border of each desert valley slopes gently towards the bordering mountains. There are but few trenches in the broad valley floors as only few streams reach them, though their borders are diversified by the erosive work of the mountain streams, and in places by the abandoned shore features of the prehistoric lake, called by the scientists, Lake Bonneville, of which Great Salt Lake is the shrunken remnant. Some of the isolated mountain ridges rise 4,000 to 5,000 feet above the general surface of the desert, and some of their highest peaks are more than 12,000 feet above sea level. Their high and narrow form necessarily makes their topography rude and rugged.

The eastern section is far more diversified than the western. Viewed in a broad way it may be regarded as rolling upland, and classed as a plateau country, for, although a large part of its surface is below the level of the Escalante Desert, all of its western margin stands above the desert floor of the Great Basin. Two great mountain ranges, the Wasatch and Uinta, also disturb the plateau classification. The former, which rise directly from the eastern limit of the Great Basin, extend from southern Idaho to the town of Nephi, near the center of Utah. The Uintas nearly meet the Wasatch about southeast of Salt Lake City and extend eastward into Wyoming and Colorado, the two ranges running almost at right angles to each other.

Unlike the desert floor of the Great Basin the Plateau region is deeply seamed with rivers, the deepest being the Green and Colorado Rivers at the southern boundary.

Here great canyons are cut, the one below Kaiparowits Plateau being about 4,000 feet deep below its rim. A few mountains, like the Navaho, and the Henry, Abajo, and La Sal groups, send their knob-like summits to the sky and thus diversify the plateau level. The Uinta is a far more simple range than the Wasatch, having been produced principally along an east and west uplift, so that the typical cross-section is a flat-topped but rather steep-sided arch. In its axial part, broad glaciated amphitheatres and canyons alternate with flat or acute ridges and summits, many of which are more than 13,000 feet above sea level. It has a well defined western terminus at Kamas Prairie. On the other hand the Wasatch consists of three sections of markedly different character. The Southern is a curving row of lofty peaks and ridges which rise abruptly both from the valley floor on the west, and the plateau surface on the east, and which are separated from each other by canyons that head far eastward. The highest mountain of this section is Timpanogos, which reaches 11,957 feet above sea-level, and more than 7,000 feet above the town of Pleasant Grove, which lies at its base. This southern section of the Wasatch terminates at the canyon of the American Fork. Hence to the Weber River is the Middle Wasatch, which is distinctively different from the Southern, in that, like most mountain ranges, it has a persistent main divide, viz., the watershed that parts the tributaries of Weber and Provo Rivers from the short streams that reach the Great Basin more directly. The loftiest part of this middle section — that lying south of Salt Lake City — resembles the Southern Wasatch in that its highest peaks lie west of the main divide and rise abruptly from the valley, but these peaks do not form a prominent row and are connected with the divide by nearly level spurs. The highest summits are about 11,000 feet high. The east side of this broad, massive, rugged portion of the range

descends about 3,000 feet or more to the prairie zone that separates it from the Uintas. North of Salt Lake City the divide lies further west, is considerably lower than to the south, and is really nothing more than the western edge of the deeply dissected Wyoming Basin.

The Northern Wasatch, which extends from Weber River into southern Idaho, has two branches, that are separated by the broad Logan Valley. The western branch, which is the Wasatch proper, is a narrow ridge that is about 10,000 feet in maximum height, but becomes lower and less continuous northward. The eastern branch is commonly known as the Bear River Range. It maintains more uniformly the level of about 10,000 feet, and merges rather gradually on the east with the upland margin of the Wyoming Basin.

The drainage of Utah is most peculiar, especially in the eastern section, of which the Grand and Green Rivers forming the Colorado are the main streams. In reality Green River might well be called an upper branch of the Colorado. The tributaries of the Green drain the greater part of both flanks of the Uintas. The largest of these are the Fremont, San Juan and Virgin Rivers. The longest stream that flows from the eastern section of Utah to the Great Basin is Bear River, which rises in the southwestern corner of the Wyoming Basin, flows northward into Idaho, turns abruptly southward into Utah, and finally empties into Great Salt Lake. Other streams that flow from the Wasatch Mountains, or the plateaus, to the Great Basin are the Ogden, Weber, Provo, Spanish Fork, and Sevier. All these rivers, except the Sevier, cut across the Wasatch Range, whose east flank is drained by them, its run-off thus being wholly tributary to the Great Basin. The Jordan is another stream that flows from Utah Lake to Great Salt Lake.

The extreme northwestern part of the state drains through Raft River into Snake River.

The climatic conditions of Utah are found more in altitude than in latitude. There are no extremes of heat or cold in the Great Basin region, though in the lower valleys the summer heat is sometimes disagreeably high. A deliciously moderate summer temperature, however, can be found in the mountains. Cold in winter is rarely extreme. Precipitation also varies largely according to altitude, the greatest rainfall seldom reaching 25 inches, while over very large areas, east and west, from five to ten inches is the average.

The soil of Utah, generally, is fertile, except where alkali abounds. Timber is abundant on the mountains, the valleys are well clothed in native grasses, while, of course, on the desert areas, sagebrush, rabbit brush, creosote brush, cactus and like plants that require little water abound.

In the chapters on the general development of the state, and that on irrigation, it has been shown that there is considerable agriculture. The Sevier and Sanpete Valleys are exceedingly fertile. Cultivation without irrigation, or "dry farming," as it is called, has been successfully carried on in the higher areas, though it has not been attempted on so large a scale as it ultimately will be. The former president of the State University, Dr. John A. Widtsoe,* has made an especial study of this question and his books are regarded as advanced standards.

The question of transportation is especially discussed in the chapter devoted to the railways, though it may be here stated that in eastern Utah the topography usually is not favorable to cheap railway construction, and that in extreme western Utah there is no incitement for such building. The mining industry has materially furthered

*Dr. Widtsoe retired from the presidency of the State University, July 1, 1921, to assume his duties as one of the Council of the Twelve Apostles, to which position he was called.

SALT BEDS, GREAT SALT LAKE.

railway construction, and the building of the transcontinental lines has done much to further industry in certain parts of Utah, that otherwise might have found much later development.

While there has been considerable hydro-electric development, the main potential water-power is scarcely touched. There are great possibilities, reaching well up to a million horse-power, which, undoubtedly, will ultimately be utilized. Much of this is found in small streams where individual power-plants for mining purposes may be installed.

With these general facts well in mind the reader is now prepared to gain specific knowledge of individual localities.

Doubtless the Great Salt Lake is the first natural object of interest the Utah sight-seer is anxious to gaze upon. Let Samuel Bowles, editor of the *Springfield Republican,* who came out with Schuyler Colfax, Vice President of the United States, and wrote his experiences in *Our New West,* describe it for us:

"This lake is, indeed, the phenomenon of the whole interior basin. It lies across the valley fifteen miles from the city, is very irregular in shape, but about fifty miles wide by a hundred long, and salter than any ocean; so salt, indeed, that fish cannot live in it, that three quarts will boil down to one quart of fine pure salt, and on whose dense waters the bather can float like a cork, though the sharp brine must be kept from his mouth and eyes under penalty of severe smarting. High rocky islands stud its area; under the free wind of the open country its waves have an ocean roll, and will breed sea-sickness at short notice, but its picturesque surroundings, the superb sunsets within its waters, and the buoyant brine, all invite to pleasure sailing upon its surface. What elements these, and the plentiful sulphur springs of the neighboring hills, and the charming scenery of the whole valley, and espe-

cially the fine location and premature development of the city, to help in the making of Salt Lake the great interior watering place of the Continent.

"When we came out of our bath in Salt Lake, a thin crust of fine salt dried upon our bodies, and in rubbing ourselves off with towels we had a most excellent substitute for a rough flesh brush. . . . The country drained by the Great Salt Lake is about one hundred and fifty miles east and west, and two hundred and fifty north and south. Four or five large streams of fresh water pour into it; and the facts that it has no visible outlet, and that its waters are one-fourth salt, mock science and make imagination ridiculous. Other salt is found in the country; there is a mountain of rock salt a few miles away; and below, in Arizona, is a similar mountain, whose salt is as pure as finest glass, and a beautiful specimen of which Brigham Young showed to us."

Burton, in his *City of the Saints,* gives a vivid picture of his approach to Salt Lake City, and of his first glimpse of the valley from the heights of the Wasatch, and the second as he emerged from Emigration Canyon. Both are worthy a place here:

"Today we are to pass over the Wasatch, the last and highest chain of the mountain mass between Fort Bridger and the Great Salt Lake Valley. Following the course of Bauchmin's Creek, we completed the total number of fordings to thirteen in eight miles.

"The next two miles were along the bed of a water course, a complete fiumara, through a bush full of tribulus, which accompanied us to the end of the journey. Presently the ground became rougher and steeper; we alighted, and set our beasts manfully against 'Big Mountain,' which lies about four miles from the station. The road bordered upon the wide arroyo, a tumbled bed of block and boulder, with water in places oozing and trickling from beneath the heaps of rocks,— living fountains these,

SALTAIR BEACH AND PAVILION, GREAT SALT LAKE.

most grateful to the parched traveler. The synclinal slopes of the chasm were grandly wooded with hemlocks, firs, balsam-pines, and other varieties of *abies,* some tapering up to the height of ninety feet, with an admirable regularity of form, color, and foliage. The varied hues of the quaking asp were there; the beech, the dwarf oak, and a thicket of elders and wild roses; while over all the warm autumnal tints already mingled with the bright green of summer. The ascent became more and more rugged; this steep pitch, at the end of a thousand miles of hard work and semi-starvation, causes the death of many a wretched animal, and we remarked that the bodies are not inodorous among the mountains as on the prairies. In the most fatiguing part we saw a hand-cart halted, while the owners, a man, a woman, and a boy, took breath. We exchanged a few consolatory words with them and hurried on. The only animal seen on the line, except the grasshopper, whose creaking wings gave forth an ominous note, was the pretty little chirping squirrel. The trees, however, in places bore the marks of huge talons, which were easily distinguished as the sign of bears. The grizzly does not climb except when young; this was probably the common brown variety. At half way the gorge opened out, assuming more the appearance of a valley; and in places, for a few rods, were dwarf stretches of almost level ground. Toward the Pass-summit the rise is sharpest; here we again descended from the wagon, which the four mules had work enough to draw, and the total length of its eastern rise was five miles. Big Mountain lies eighteen miles from the city. The top is a narrow crest, suddenly forming an acute, based upon an obtuse, angle.

"From that eyrie, 8,000 feet above sea-level, the weary pilgrim first sights his shrine, the object of his long wanderings, hardships, and perils, the Happy Valley of the Great Salt Lake. The western horizon, when visible, is

bounded by a broken wall of light blue mountain, the Oquirrh, whose northern-most bluff buttresses the southern end of the lake, and whose eastern flank sinks in steps and terraces into a river basin, yellow with the sunlit golden corn, and somewhat pink with its carpeting of heath-like moss. In the foreground a semi-circular sweep of hill-top and an inverted arch of rocky wall shuts out all but a few spans of the valley. These heights are rough with a shaggy forest, in some places black-green, in others of brownish-red, in others of the lightest ash-color, based upon a ruddy soil; while a few silvery veins of snow still streak the bare gray rocky flanks of the loftiest peak.

"After two miles of comparatively level ground we came to the foot of 'Little Mountain,' and descended from the wagon to relieve the poor devils of mules. The near slope was much shorter, but also it was steeper far than 'Big Mountain.' The counter-slope was easier, though by no means pleasant to contemplate with the chance of an accident to the brake, which in all inconvenient places would part with the protecting shoe-sole.

"Beyond the eastern foot, which was ten miles distant from our destination, we were miserably bumped and jolted over the broken ground at the head of Big Canyon. Down this pass, whose name is a translation of the Yuta name Obitkokichi, a turbulent little mountain stream tumbles over its boulder-bed, girt with the usual sunflower, vines of wild hops, red and white willows, cotton-wood, quaking asp, and various bushes near its cool watery margin and upon the easier slopes of the ravine, with the shin or dwarf oak *(Quercus nana)*, mountain mahogany, balsam, and other firs, pines and cedars. The road was a narrow shelf along the broader of the two spaces between the stream and the rock, and frequent fordings were rendered necessary by the capricious wanderings of the torrent. I could not but think how horrid must have been its appearance when the stout-hearted Mormon pioneers first

EMIGRATION CANYON.

ventured to thread the defile, breaking their way through the dense bush, creeping and clinging like flies to the sides of the hills. Even now accidents often occur; here, as in Echo Canyon, we saw in more than one place unmistakable signs of upsets in the shape of broken spokes and yoke-bows.

"At one of the most ticklish turns Macarthy kindly pointed out a little precipice where four of the mail passengers fell and broke their necks, a pure invention on his part, I believe, which fortunately, at that moment, did not reach Mrs. Dana's ears. He also entertained us with many a tale, of which the hero was the redoubtable Hanks; how he had slain a buffalo bull single-handed with a bowie-knife; and how, on one occasion, when refused hospitality by his Lamanite brethren he had sworn to have the whole village to himself, and had redeemed his vow by reappearing *in cuerpo* with gestures so maniacal that the sulky Indians all fled, declaring him to be 'bad medicine.' The stories had at least local coloring.

"In due time, emerging from the gates, and portals, and deep serrations of the upper course, we descended into a lower level; here Big, now called Emigration Canyon, gradually bulges out, and its steep slopes of grass and fern, shrubbery and stunted brush, fall imperceptibly into the plain. The valley presently lay full before our sight. At this place the pilgrim emigrants, like the hajjis of Mecca and Jerusalem, give vent to the emotions long pent up within their bosoms by sobs and tears, laughter and congratulations, psalms and hysterics. It is indeed no wonder, that the children dance, that strong men cheer and shout, and that nervous women, broken with fatigue and hope deferred, scream and faint; that the ignorant should fondly believe that the 'Spirit of God pervades the very atmosphere,' and that Zion on the tops of the mountains is nearer heaven than other parts of earth. In good sooth, though uninfluenced by religious fervor, beyond the nat-

ural satisfaction of seeing a bran-new Holy City even I could not, after nineteen days in a mail-wagon, gaze upon the scene without emotion.

"The sublime and the beautiful were in present contrast. Switzerland and Italy lay side by side. The magnificent scenery of the past mountains and ravines still floated before the retina, as emerging from the gloomy depths of the Golden Pass, — the mouth of Emigration Canyon is more poetically so called, — we came suddenly in view of the Holy Valley of the West.

"The hour was about 6 p. m.; the atmosphere was touched with the dreamy haze, as it generally is in the vicinity of the lake; a little bank of rose colored clouds, edged with flames of purple and gold, floated in the upper air, while the mellow radiance of an American autumn, that bright interlude between the extremes of heat and cold, diffused its mild soft lustre over the face of earth.

"The sun, whose slanting rays shone full in our eyes, was setting in a flood of heavenly light behind the bold, jagged outline of 'Antelope Island,' which, though distant twenty miles to the northwest, hardly appeared to be ten. At its feet, and then bounding the far horizon, lay, like a band of burnished silver, the Great Salt Lake, that still, still innocent Dead Sea. Southwestward also, and equally deceptive as regards distance, rose the boundary of the Valley plain, the Oquirrh Range sharply silhouetted by a sweep of sunshine over its summits, against the depths of an evening sky, in that direction so pure, so clear, that vision one might fancy, could penetrate behind the curtain into regions beyond the confines of man's ken. In the brilliant reflected light, which softened off into a glow of delicate pink, we could distinguish the lines of Brigham's,* Coon's, and other canyons, which water has traced through the wooded flanks of the Oquirrh, down to

*This is an evident error on Burton's part. The canyon is Bingham's, not Brigham's, and is the scene of the wonderful copper mine so vividly described in a later quotation in this chapter.

the shadows already purpling the misty benches at their base. Three distinct and several shades, light azure, blue, and brown blue, graduated the distances, which extended at least thirty miles.

"The undulating valley plain between us and the Oquirrh Range is 12 to 15 miles broad, and markedly concave, dipping in the centre like the section of a tunnel, and swelling at both edges into bench lands, which mark the ancient bed of the lake. In some parts the valley was green; in others, like the sands of the Arabian desert, with scatters of trees, where the Jordan of the West rolls its opaline wave through pasture lands of dried grass dotted with flocks and herds, and fields of ripening yellow corn. Everything bears the impress of handiwork, from the bleak benches behind to what was once a barren valley in front. Truly the Mormon prophecy had been fulfilled: already the howling wilderness, in which twelve years ago a few miserable savages, the half-naked Digger Indians, gathered their grass-seed, grasshoppers, and black crickets to keep life and soul together, and awoke with their war cries the echo of the mountains, and the bear, the wolf, and the fox prowled over the site of a now populous city — 'has blossomed like the rose.'

"This valley, this lovely panorama of green, and azure, and gold, this land, fresh, as it were, from the hands of God, is apparently girt on all sides by hills: the highest peaks, raised 7,000 to 8,000 feet above the plain of their bases, show by gulches veined with lines of snow that even in this season winter frowns upon the last smile of summer.

"Advancing, we exchanged the rough cahues and the frequent fords of the ravine for a broad smooth highway, spanning the easternmost valley-bench, a terrace that drops like a Titanic step from the midst of the surrounding mountains to the level of the present valley-plain. From a distance, — the mouth of Emigration Canyon is

about 4.30 miles from the city, — Zion, which is not on a hill, but, on the contrary, lies almost in the lowest part of the river plain, is completely hid from sight, as if no such thing existed. Mr. Macarthy, on application, pointed out the notabilia of the scene.

" Northward, curls of vapor ascending from the gleaming sheet, the Lake of Hot Springs, set in a bezel of emerald green, and bordering by another lake bench upon which the glooms of evening were rapidly gathering, hung like a veil of gauze around the waist of the mountains. Southward for twenty-five miles stretched the length of the valley, with the little river winding its way like a silver thread in a brocade of green and gold. The view in this direction was closed by ' Mountain Point,' another formation of terraced range, which forms the water-gate of Jordan, and which conceals and separates the fresh water that feeds the Salt Lake, — the Sea of Tiberias from the Dead Sea.

" As we descend the Wasatch Mountains, we could look back and enjoy the view of the eastern wall of the Happy Valley. A little to the north of Emigration Canyon, and about one mile nearer the settlement, is the Red Butte, a deep ravine, whose quarried sides show mottlings of the light ferruginous sandstone which was chosen for building the Temple wall.* A little beyond it lies the single City of the Dead, decently removed three miles from the habitations of the living, and farther to the north is City Creek Canyon, which supplies the Saints with water for drinking and for irrigation. Southeast of Emigration Canyon are other ravines, Parley's, Mill Creek, Great Cottonwood, and Little Cottonwood, deep lines winding down the timbered flanks of the mountains, and thrown into relief by the darker and more misty shading of the farther flank-wall.

*None of the Red Butte sandstone was used in the construction of the Temple, that edifice being of granite. However, sandstone from Red Butte was used in the construction of the lower part of the wall enclosing the Temple grounds, which constitute Temple Block.

BLACK ROCK, GREAT SALT LAKE.

" The ' Twin Peaks,' the highest points of the Wasatch Mountains, are the first to be powdered over with the autumnal snow. When a black nimbus throws out these piles, with their tilted up rock strata, jagged edges, black flanks, rugged brows, and bald heads gilt by a gleam of sunset, the whole stands boldy out with that phase of sublimity of which the sense of immensity is the principal element. Even in the clearest of weather they are rarely free from a fleecy cloud, the condensation of cold and humid air rolling up the heights and vanishing only to be renewed.

" The bench land then attracted our attention. The soil is poor, sprinkled with thin grass, in places showing a suspicious whiteness, with few flowers, and chiefly producing a salsolaceous plant like the English samphire. In many places lay long rows of bare circlets, like deserted tent-floors; they proved to be ant-hills, on which light ginger-colored swarms were working hard to throw up the sand and gravel that everywhere in this valley underlie the surface. The eastern valley-bench, upon whose western declivity the city lies, may be traced on a clear day along the base of the mountains for a distance of twenty miles; its average breadth is about eight miles."

The observant visitor at Salt Lake City of today looking out from one of the elevated view-points over the valley to the west and south, will see smoke ascending from the northern point of the Oquirrh Range, and with a glass he can clearly discern in detail the smoke-stacks and buildings of the various mills of the Utah Copper Company and the great piles of waste or dumpage. Further to the south his keen eye may fall upon what appears to be a bare spot on the mountains. This is the wonderful Copper Mine,— in reality a mountain of copper — at Bingham, and recognized as one of the most marvelous mines of the world. T. A. Richards, Editor of the *Mining and*

Scientific Press, once wrote a description for his paper of this mine, a portion of which is as follows:

"The mine of the Utah Copper Company is a mountain impregnated with copper — a veritable mountain of ore. Such has been the dream of the prospector from time immemorial. Mount Morgan, in Queensland, Australia, was a mountain of gold ore, in-so-far as its summit was excavated bodily and sent to the mill. . . . Mount Lyell and Mount Bischoff, in Tasmania, are the sites of big mine-workings that follow ore-bodies rich in copper and tin, respectively; Mount Davidson (in Nevada), was enriched by the Comstock lode, and the Rammelsberg by its famous deposit of silver; but none of these was a 'mountain of ore' so truly as this great quarry, the face of which is 1,500 feet in vertical height and 3,600 feet wide at the base.

"To realize the bigness of the mine, it is best to ascend half-way up the opposite hill-slope, on the east side of Bingham Canyon; there one faces the serried terraces that mark the successive slices now being cut out of the mass of copper-bearing rock. It is an impressive picture of highly organized human industry. The crest has been removed already, but, foreshortened by distance, the mountain still looks like a pyramid, the levels of successive excavation suggesting the step-like cross-section of one of the famous Egyptian tombs. The outer cover of the hill is colored red, by oxidization; the mass itself is gray. It is a huge theater, in which the actors are 1,800 men; but so big is the stage that they are hardly discernible at that distance. Ore-trains, like children's toys seen from afar, run along the levels, and black steam-shovels vomit puffs of smoke as they dig energetically into the piles of broken rock made by the blasting. The smoke from the engines and the little black figures here and there give a touch of the infernal to the picture, but the suggestion is contradicted by the blue sky that canopies

the scene. On top of the hill, like a redoubt, is a tank to which water is brought by gravity from Middle Canyon, four miles west, to be conducted to the different levels for drinking, for the boilers, and for other purposes.

"At noon, from this point of vantage, I watched the blasting. Before it begins, those in control of the operation on the various terraces indicate the fact that all is ready by blowing one long and three short calls from the whistle of a steam-shovel. When all, in turn, have given this notification, the main whistle, blown by compressed air, sounds a general alarm, consisting of an irregular number of long and short calls. This is the signal for the men in the pit to spit their fuses. As soon as the men on the level above see that the fuses in the pit are lighted, they spit theirs, and so in succession up the series of levels or terraces. Meanwhile the main whistle continues to sound the warning at frequent intervals. As the blasting is completed each steam-shovel gives two long whistles, and when all have reported, the main whistle answers with two long calls, thereby notifying all the men on the hill that the blasting is finished.

"First a series of shots is heard in the pit, these representing the blasting of big rocks — 'block-holing.' Then a less noisy explosion is followed by a rush of broken rock down the face of one of the terraces. The most effective holes make the least noise. The rumble of running ground is heard above the successive explosions. Some of the holes emit smoke like a cannon. Fume and dust enliven the scene. Everything is on a big scale; as much as 25,000 tons of ore have been broken in one blast, of 10 or 12 holes. Soon the uproar shifts to the right shoulder of the mountain and over it to the other side, awakening fresh echoes in the background of hills.

"South and eastward the levels are extended for the disposal of the waste that is stripped from above the ore, for most of the oxidized cap has lost so much of its cop-

per by leaching as to be merely an overburden. At the beginning of 1918, 121 acres had been stripped of capping, and 138 acres additional had been partly stripped. The dumps of waste represent a face of serrated ground almost as big as the mine itself.

"It is a big mine in the open air. Winter does not seriously hinder operations; hardly 24 hours is lost per annum, although in the winter of 1917, for half a shift during blizzards, it was impossible to move the ore-trains until the tracks were cleared by the snowplough. Being open to the sky, the men are visible all the time; this is not without a salutary influence during labor troubles. There is nothing secret about these *al fresco* operations, which are always open to the public view.

" . . . The hill is honey-combed with 60 miles of underground workings, which were made chiefly to explore the ore body and to ascertain its dimensions. . . . Up to the end of 1918 this mine had produced 80,000,000 tons of ore averaging 1.4% copper, enabling the company to pay $92,015,782 in dividends, and to accumulate nearly $50,000,000 in working capital, thus showing a total profit of $142,000,000 in eleven years."

Echo Canyon has been famous ever since it was first described, and I know of no better description than that given by Burton, in his *City of the Saints.* He says:

"Beyond the stream we ascended Yellow-Creek Hill, a steep chain which divides the versant of the Bear River eastward from that of Weber River to the west. The ascent might be avoided but the view from the summit is a fine panorama. The horizon behind us is girt by a mob of hills, Bridger's Range, silver veined upon a dark blue ground; nearer, mountains and rocks, cones and hog-backs, are scattered about in admirable confusion, divided by shaggy rollers and dark ravines each with its own little water-course. In front the eye runs down the long bright red line of Echo Canyon, and rests with astonishment

upon its novel and curious features, the sublimity of its broken and jagged peaks, divided by dark abysses, and based upon huge piles of disjointed and scattered rock. On the right, about half a mile north of the road, and near the head of the canyon, is a place that adds human interest to the scene. Cache Cave is a dark, deep, natural tunnel in the rock, which has sheltered many a hunter and trader from wild weather and wilder men; the wall is probably of marl and earthy limestone, whose whiteness is set off by the ochrish brick red of the ravine below.

"Echo Canyon has a total length of twenty-five to thirty miles, and runs in a southeasterly direction to the Weber River. Near the head it is from half to three-quarters of a mile wide, but its irregularity is such that no average breadth can be assigned to it. The height of the buttresses on the right or northern side varies from 300 to 500 feet; they are denuded and water-washed by the storms that break upon them under the influence of southerly gales; their strata here are almost horizontal; they are inclined at an angle of 45° and the strike is northeast and southwest. The opposite or southern flank, being protected from the dashing and weathering of rain and wind, is a mass of rounded soil-clad hills, or sloping slabs of rock, earth-veiled, and growing tussocks of grass. Between them runs the clear, swift, bubbling stream, in a pebbly bed now hugging one, then the other side of the chasm: it has cut its way deeply below the surface; the banks or benches of stiff alluvium are not unfrequently twenty feet high; in places it is partially dammed by the hand of Nature, and everywhere the watery margin is of the brightest green, and overgrown with grass, nettles, willow thickets, in which the hop is conspicuous, quaking asp, and other taller trees. Echo Canyon has but one fault: its sublimity will make all similar features look tame.

"We entered the canyon in somewhat a serious frame

of mind; our team was headed by a pair of exceedingly restive mules; we had remonstrated against the experimental driving being done upon our vile bodies, but the reply was that the animals must be harnessed at some time. We could not, however, but remark the wonderful picturesqueness of a scene, of a nature which in parts seemed lately to have undergone some grand catastrophe. The gigantic red wall on our right was divided into distinct blocks or quarries by a multitude of minor lateral canyons, which, after rains, add their tribute to the main artery, and each block was subdivided by the crumbling of the softer and the resistance of the harder material, a clay conglomerate. The color varied in places from white and green to yellow, but for the most part it was a dull ochrish red, that brightened up almost to a straw tint where the sunbeams fell slantingly upon it from the strip of blue above. All served to set off the curious architecture of the small masses. A whole Petra was there, a system of projecting prisms, pyramids, and pagoda towers, a variety of form that enabled you to see whatever your peculiar vanity might be, — columns, porticoes, façades, and pedestals. Twin lines of bluffs, a succession of buttresses all fretted and honeycombed, a double row of steeples slipped from perpendicularity, frowned at each other across the gorge. And the wondrous variety was yet more varied by the kaleidoscopic transformation caused by change of position; at every different point the same object bore a different aspect."

Perhaps the most interesting of these peculiarly eroded rocks are thus described in the U. S. Geological Survey's *Guidebook to the Overland Route:*

"About two miles west of Echo a group of curious monument-like rocks, some of which are more than one hundred feet high may be seen to the right (north) of the track, well up the slope. These are known as The Witches and are remnants formed by the erosion of a

coarse conglomerate. Although any rock that has a fancied resemblance to some familiar shape is likely to attract greater attention than many a more significant feature of the landscape, these bizarre monuments are well worthy of more than a passing glance. The name, 'The Witches,' is suggested by the form of the cap-rock of one of the monuments, which is shaped something like the fabled witch's hat. The caps are formed from a light-colored band of conglomerate that is cemented into a harder mass than the underlying pink conglomerate. This hard cap-rock protects the underlying beds from the rain until the supporting column, by slow crumbling, becomes too slender to hold it. When the cap falls off the monument soon becomes pointed at the top and is finally reduced to the level of the surrounding country."

Below Echo Canyon is Weber Canyon, the connection between the two being known as "The Narrows." Says the *Overland Guide:*

"Three miles west of Henefer the coarse red pudding-stone of the Wasatch beds extends down to the river level, and the broad basin-like valley suddenly narrows to a gorge barely wide enough for the river to pass through. The road-bed has been cut in the side of this gorge, and in the cuts may be seen great boulders of quartzite, some of them four feet in diameter, with smaller boulders, pebbles, and sand filling the space between them. These materials are cemented into the resistant mass by red oxide of iron, which gives a brilliant color to the whole mass."

On emerging from "The Narrows" the observant will see that the train passes through a long cut in the shale in a series of strata which are all turned up to a vertical position. The shale is divided by strata of limestone, and, as the softer shale disintegrates more rapidly under the influences of wind and rain than the limestone strata, the latter are often left standing alone as detached vertical walls. The most remarkable of these limestone walls are

known as the "Devil's Slide." Dr. F. V. Hayden, the head of the Hayden Geological Survey, which was one of the several independent surveys finally merged into the present U. S. Geological Survey, in a fascinating book of description and photographs, entitled *Sun Pictures of Rocky Mountain Scenery* thus describes the Slide:

"The beds of limestone are from 15 to 20 feet in thickness, and rise to the height of 1,000 feet or more upon the almost perpendicular side of the mountain. They appear to have been thrust out of the mountain side, and hence many people have regarded them as dikes or outbursts of igneous material. The beds of limestone are about 200 feet apart, and the immediate space, which was composed of softer material, has been worn out by atmospheric agencies, and smoothed down and grassed over and covered with flowers and small shrubs."

Now let a novelist, Zane Grey, give us a picture of the desert region of southeastern Utah. This is from his *Heritage of the Desert:*

"He saw a red world, his eyes seemed to be bathed in blood. Red, scaly ground, bare of vegetation, sloped down, down, far down to a vast irregular rent in the earth, which zigzagged through the plain beneath. To the right it bent its crooked way under the brow of a black-timbered plateau; to the left it straightened its angles to find a V-shaped vent in the wall, now uplifted to a mountain range. Beyond this earth-riven line lay something vast and illimitable, a far-reaching vision of white wastes, of purple plains, of low mesas lost in distance. It was the shimmering dust-veiled desert."

And lest one should think this description the pure imagination of a romancer, let me put side by side with it the description of a scientist, one of those first pioneers of exact knowledge to penetrate into the wild and desert fastnesses of Utah and bring therefrom definite information as to what they were composed of. This is a description of

one of the picturesque portions of Utah, even yet seldom seen by Utahns, and to be found in few places in the world. It is taken from Captain Dutton's *Geology of the High Plateaus of Utah:*

"If we stand upon the eastern verge of the Wasatch Plateau and look eastward, we shall behold one of those strange spectacles which are seen only in the Plateau Province, and which have a peculiar kind of impressiveness, and even of sublimity. From an altitude of more than 11,000 feet the eye can sweep a semicircle with a radius of more than 70 miles. It is not the wonder inspired by great mountains, for only two or three peaks of the Henry Mountains are well in view; and these, with their noble Alpine forms, seem as strangely out of place as Westminster Abbey would be among the ruins of Thebes. Nor is it the broad expanse of cheerful plains stretching their mottled surfaces beyond the visible horizon. It is a picture of desolation and decay; of a land dead and rotten, with dissolution apparent all over its face. It consists of a series of terraces, all inclining upwards towards the east, cut by a labyrinth of deep narrow gorges, and sprinkled with numberless buttes of strange form and sculpture. We stand upon the Lower Tertiary, and right beneath our feet is a precipice leaping down across the edges of the level strata upon a terrace 1,200 feet below. The cliff on which we stand stretches far northward into the hazy distance, gradually swinging eastward, and then southward far beyond the reach of vision and below the horizon. It describes, as we well know, a rude semicircle around a center more than 40 miles to the eastward. At the foot of this cliff a terrace about six miles wide of Upper Cretaceous beds, inclining upwards towards the east very slightly, and at that distance it is cut off by a second cliff, plunging down 1,800 feet upon Middle Cretaceous beds. This second cliff describes a smaller semicircle like the first and concentric with it. From its foot

the strata again rise gently towards the east through a distance of ten miles, and are cut off by a third series of cliffs as before. There are five of these concentric lines of cliffs. In the center there is an elliptical area about forty miles long and twelve to twenty broad, its major axis lying north and south, and as completely girt about by rocky walls as the valley of Rasselas. It has received the name of the San Rafael Swell."

In the chapter on the Geology of Utah there is given a fairly complete description, in popular terms, of this marvelous "Swell," which so materially has affected the scenery of Utah, and which has helped change the ideas of geologists over the world.

Let me give still another picture, or rather, suggest a changing panorama, which every rider in an automobile, who goes from Salt Lake City by the Arrowhead Trail into southern California, may enjoy.

Soon after leaving Cedar City, one comes to the southern rim of the Great Basin. Here one is at an elevation of some 4,000 feet. The climate is cool; the nights cold, though in the sunshine of the middle of the day the temperature reaches to 85° or 90° F. The trees, the flowers, the fields, the wild country, mountain slopes, etc., all speak of a temperate climate. Then, suddenly, we begin to descend. Passing through a canyon of black basaltic rock, in half an hour the scene has changed materially. We leave the pines, the cedars, the pinyons behind, and instead of cool breezes hot winds strike us from either side. The vegetation changes, the flowers are different. Cactus of varied kinds come into sight, and other desert verdure presents itself. We have left the Great Basin and have descended to the Basin of the Colorado River. In many respects the country we are now in reminds us of the Mohave Desert, near Barstow. F. S. Dellenbaugh who came *up* from Kanab,— while we are supposed to be traveling *down* — gives an interesting account of this part

of the country in *Scribner's,* January, 1904. He says:

"Close on our left lay the long blue line of the Pine Valley Mountains lifting their snow-streaked summits far above the wonderful labyrinth of many-colored cliffs and buttes and lava-beds threaded by our road, which, now rocky and dry, now sandy and dry, but ever dry, led continually up the deep basin of the river Virgin. Except where water can be spread over the ground, the surface all through this country is so devoid of moisture that nothing but plants requiring a minimum is said to exist. Vegetation, therefore, is scattering, aggressive, threatening. At the same time one is surprised by its abundance, as well as by the richness of color and the profusion of exquisite blossoms in spring, the varieties of cactus especially being laden with flowers whose tender petals and soft beauty are a marvel in contrast to the parent stem as well as the chaotic aridity of the environment. It seems as if a lion and a lamb were verily slumbering at our feet. And not only the cacti, but the 'live oak' with its thorn-set leaf, the rabbit-brush, the sage, the greasewood, and all the others have their blossoms, while in between, scattered thickly over the unfriendly earth, are multitudes of smaller flowering plants strange to all but the botanical traveler, and some of them, I fancy, still strange to him, yet as fascinating as the pampered products of a hot-house. But where water can be fed to the soil it instantly becomes prolific.

"The Mormons being past-masters in irrigation, the rugged land contains a number of districts that, by contrast with the surroundings, rival the Garden of Eden. Here grapes, peaches, almonds, figs, pomegranates, melons, etc., of choicest flavor are yielded in abundance. Every few miles the eye is surprised and gratified by the green fields and foliage of one of these bright oases. Nothing could be more refreshing than a sudden encounter with a broad green stretch of this kind after miles across arid wastes where one begins to imagine meadows,

farms, and shady brooks to be mere phantasmagoria — when, lo! a magic turn of the road reveals a sweep of emerald with ditches of dashing water, plume-like poplars of Lombardy, fan-spreading cottonwoods, vineyards, roses, peach and apple orchards, fig-trees, long lines of acanthus, and all the surroundings of comfortable country life. Again a turn, and the mellow beauty vanishes — not a drop of water then anywhere in sight."

This change from charming, refreshing, delicious oasis to immediate desert is one of the wonders of this unique land. But my reader must not assume that the word "desert" implies nothing of delight. In my book, *The Wonders of the Colorado Desert,* I endeavored to express some of the lure one feels towards such desolate areas. And here in Southern Utah, when night comes, there is the same ineffable sky of turquoise, the same wonderfully luminous stars; the same glowing sunsets, and the same exquisite satisfaction in sleeping out-of-doors. St. George is an anomaly to the rest of Utah. It is in as different a country in appearance and climate from Ogden, say, as one can well conceive. Yet both are part of this remarkable state; and both are richly fertile. At St. George one sees a land of fertility and of plenteousness, a land verily flowing with milk and honey. See the thousands of contented kine grazing on the luscious grasses of the meadows, or feeding at the great stacks of alfalfa or other hay, and these give their rich milk by the millions of gallons annually. And on every hand are flowers galore, of a thousand varieties, rich in nectar, from which the bees extract the most delicious honey that ever tickled the palate of man.

Ride along with me, and mile after mile, you shall see fields of waving grain, in varying degrees of ripeness; hundreds, thousands, of acres of beets, of corn, of alfalfa, while everywhere are houses, large and small, old and new, simple and pretentious, surrounded by the family

MORMON TEMPLE, ST. GEORGE.

orchards, where trees laden with apples, pears, cherries, plums, peaches, apricots, walnuts, etc., speak of the delight of the numerous small boys and girls, apparently at home, and of laden cupboards where cans of fruit, jars, preserves, marmalades, and like will soon repose. The box-elder, the cottonwood, the Lombardy poplar, the maple, the elm, and the acacia, abound, giving interesting sky lines which change rapidly as our auto speeds along.

And this is not a scene confined to one locality in Utah: it may be found in every direction where water can be placed upon the soil. Scores, hundreds of valleys dot the whole state; some large, some small, surrounded by mountains, or of lower hills, where purely pastoral landscapes charm the eye, the silvery streams and irrigating ditches adding their flashing surfaces or blue stretches to the pleasing effect.

Here is a description by Stansbury, one of the earliest of Utah's explorers, of the Green River Valley:

"Since leaving the basin and entering the valley of Green River, a remarkable change in the face of the country is apparent. Instead of the disturbed and upheaved rocks which characterize that region, flat tables or terraces of horizontal strata of green and blue sand and clay, and sandy conglomerate, or agglutinated sand, now form the principal feature of the country, standing alone, like island buttes, amid the barren plains, or forming escarpments which alternately impinge upon the banks of the winding streams. These tables, which extend from the rim of the basin to the South Pass, and thence to Brown's Hole, on Green River, are apparently the result of a deposit in still water. The layers are of various thicknesses from one foot to that of a knife blade, and the hills are fast wearing away under the influence of the wind and rain.

"The whole country looks as if it had, at one time, been the bottom of a vast lake, which, bursting its barrier

at Brown's Hole, had been suddenly drained of a portion of its waters, leaving well defined marks of the extent of the recession upon the sides of these isolated buttes. As the channels became worn by the passage of the water through the outlet into Green River, another sudden depression followed, and the same operation was repeated at still a lower level. There are three well defined levels, and the same appearances of horizontal water lines occur here as were noticed upon the hillsides of the islands in the Great Salt Lake; save that in the latter case they are more numerous and closer together, and the subsidence of the waters appears to have been more gradual. The surface of the ground was strewn with fragments of obsidian, black, shiny pebbles, flints, and white, yellow, and smoky quartz."

Southeastern Utah is, even to this day, largely a *terra incognita.* A few cowboys, prospectors, sheepherders, and an occasional "butter into the wild," as myself, are all that ever visit it. Think of the fact that the most wonderful natural bridges in the known world were not discovered until 1903, (see special chapter), and that in this day, 1921, it is not an unreasonable thing to say that not a hundred people a year have seen them since that time.

Only a year ago, Dr. Charles G. Plummer of Salt Lake City went on a photographing expedition to Bryce Canyon. Here he came in touch with a Mormon bishop, named Johnson, who informed him of the existence of a natural bridge, some twenty-five miles away, that scarcely anyone save himself knew of. Arrangements were made and Dr. Plummer went and saw the bridge.

Let me give one more quotation from one who visited and studied this little known portion of Utah, as far back as 1859. I quote from the *Report of the Exploring Expedition from Santa Fe, N. M., to the Junction of the Grand and Green Rivers of the Great Colorado of the West, in 1859, under the Command of Capt. J. N. Macomb.* The

26988

expedition had entered Utah north of the San Juan River, a little south of the Sierra La Sal, in what is now San Juan County.

"August 23. Leaving servants and packs in camp, we to-day descended the canyon of Labyrinth Creek, to its junction with Grand River. Until within a mile of the junction, the character of the canyon remains the same; a narrow gorge, with vertical sides, from 150 to 300 feet in height, its bottom thickly grown with bushes and obstructed with fallen rocks and timber, passable but with infinite difficulty. At the place mentioned above, however, our progress was arrested by a perpendicular fall, some 200 feet in height, dark, and ragged, impassable to everything but the winged bird. At the bottom, the whole breadth of this canyon is occupied by the turbid waters of the Grand River, here a sluggish stream, at least with no current visible to us who were more than 2,000 feet above it. In this great artery, a thousand lateral tributaries terminate, flowing through channels precisely like that of Labyrinth Creek; underground passages by which intermittent floods from the distant highlands are conducted through this country, producing upon it no other effect than constantly to deepen their own beds. Toward the south the canyon of Green River was easily traced. Perhaps four miles below our position it is joined by another great chasm coming in from the northeast, said by the Indians to be that of Grand River. From the point where we were it was inaccessible, but we had every reason to credit their report in reference to it."

From these interesting descriptions of varied portions of the state it will well be seen that Utah is no dull monotonous plain, without romantic and picturesque features. I might have quoted alike English, French and American travelers, explorers and scientists. Their descriptions show us parts of the state passed through yearly by hundreds of thousands of people, on the public highways or

railways; also parts of the state even yet almost unknown, and that can be reached only by wagon, on horseback, or with pack-train. And yet not one-tenth, one-twentieth, one-hundredth of the state, or of its distinctive features of attraction and fascination have been mentioned. Practically, no account has been taken of the cities of the State, and some of them are of a character that deserve and almost demand detailed description. Suffice to say that, if the world-travelers and students I have here quoted, have found so much to arrest and occupy their devoted attention, no ordinary traveler, if he be but observant, can fail to find in Utah enough of variety, of romance, of allurement, of fascination, of picturesqueness to satisfy him.

Furthermore, as it seems to be in the hearts of many men and some women to desire to discover what others have not seen, to explore unknown regions, in fact, I have purposely enlarged upon unknown Utah, deliberately selected so many quotations about it, that these persons of exploring tendencies may know that southeastern Utah is a country that will satisfy their proclivities to the utmost. On the other hand, those who wish to find homes, amid agricultural and horticultural scenes, can be gratified, while those who long for well-peopled cities, advantageously located for business, health, recreation, and the rearing of their families, can find variety enough to satisfy the most exacting in this interior land of the Great Salt Lake.

CHAPTER II

THE ANCIENT INHABITANTS OF UTAH

Like Arizona and New Mexico, not only does Utah have living Indians within its boundaries, but the first explorers found evidences of earlier peoples, the ruins of whose dwellings used to cause much conjecture. Modern archaeologists, however, feel certain that they have solved the major problems of the existence of these ancient inhabitants.

The first explorer to discover ruins, in what is now recognized as the southwestern portion of the United States, was Captain J. H. Simpson, who fully described the ruins of the Chaco Canyon and Mesa in New Mexico. Later, the ruins of the Mancos Canyon, in Colorado, were discovered, and from that time on, up even to the present date, discoveries have been made in Utah, Arizona and New Mexico.

The question often has been asked: How far north have these ruins of Cliff- Cave- and Pueblo-dwellers been discovered? We can answer this question now with a reasonable degree of assurance. Dr. Byron Cummings, formerly of the University of Utah, but now Dean of the University of Arizona, states in the *Bulletin* later referred to:

"In the summer of 1906, the writer made an examination of the ruins in Nine Mile Canyon, along the northern border of Carbon County, in the eastern part of Utah, and obtained no trace of ruins farther north in that region except one small house on the Green River about four

miles north of where Nine Mile, (Minnie Maud), creek joins the Green River. Mr. George Bishop of Smithville, in the western part of the state near the Nevada border, writes that there is a group of ruins a few miles from his place, that seems to be a well defined pueblo; and Mr. Don McGuire, of Ogden, has obtained good specimens of pottery from a ruin near Brigham City. The Smithville ruins are on nearly the same parallel as those of Carbon County, but Brigham City lies far to the north."

With the exception above noted it may generally be stated that nothing has been discovered north of the Mancos and Animas regions in Colorado, or above 38 degrees of latitude in Utah. Indeed, I am not familiar with ruins having been discovered in Utah, (except as above), outside of the five southern counties — Washington, Iron, Garfield, Kane and San Juan. The oldest discovered and best-known are in San Juan County, in McElmo and other creek-canyons tributary to the San Juan river. There is little doubt in my own mind that these ancient inhabitants were perfectly familiar with that marvellous region, discovered by the white man as recently as 1904, where the colossal Natural Bridges of Utah are located.

Macomb in his *Explorations* thus describes some of the ruins discovered by his party in 1859:

"The country lying between the Mancos (in Colorado) and Dolores is generally dry and sterile, yet is everywhere covered with fragments of broken pottery, showing its former occupation by a considerable number of inhabitants; it is now utterly deserted."

Later on he reports another mass of ruins seen from an unidentified hill. Clearly, however, he was looking into Utah:

"The hill from which we obtained this view is crowned with an extensive series of very ancient ruins. The principal one is a pueblo, nearly 100 feet square, once sub-

CLIFF DWELLINGS, LA SAL NATIONAL FOREST.

stantially built, of dressed stone, now a shapeless heap, in which the plan of the original structure can, however, be traced. Like most of the ruined pueblos of New Mexico, it consisted of a series of small rooms clustered together, like cells in a beehive. Near the principal edifice are mounds of stone, representing subordinate buildings. Among these are numerous large depressions marking the places of cisterns or estufas. Quantities of broken pottery, similar to that so commonly seen in like circumstances, but bearing the marks of great age, strew the ground about these ruins.

"A mile or two up the river are several other stone-houses built high up in the cliffs, 150 feet above the stream; they are usually placed on ledges covered by projecting rocks, which act as roofs. These houses are not large, and were probably only occupied by the guardians of the fields once in cultivation below. All of these, as well as the more extensive ruins before mentioned, are admirably located for defense, and would easily be held by a handful of determined men against any number of assailants armed only with the weapons of savage warfare.

" . . . Surouaro is the name of a ruined town which must once have contained a population of several thousands. The name is said to be of Indian (Utah) origin, and to signify desolation, and certainly no better name could have been selected. The surrounding country is hopelessly sterile; and, whatever it once may have been, Surouaro is now desolate enough. Here are two canyons, cut in the sandstone by two former streams. These unite nearly a mile below camp. All the interval of mesa between them is covered with ruins. The houses are, many of them, large, and all built of stone, hammer-dressed on the exposed faces. Fragments of pottery are exceedingly common, though, like the building, showing great age. There is every evidence that a large population resided here for many years, perhaps centuries, and

that they deserted it several hundred years ago; that they were Pueblo Indians, and hence peaceful, industrious, and agricultural. How they managed to exist here, and how their town was depopulated, are questions that suggest themselves at once, but certainly the former is the more puzzling. They may have been exterminated by the Navahos and Utahs, warlike and aggressive tribes, who now occupy the adjacent region; but where a population of many thousands once existed, now as many hundreds could not be sustained, either by agriculture or the chase. The surrounding country contains very little animal life, and almost none of it is now cultivable. It is 7,000 feet in altitude, intensely cold in winter, and very dry throughout the year. The want of water alone would forbid the residence of any considerable number of persons at Surouaro if everything else were furnished them. The arroyos, through which streams seem to have once flowed, are now dry, and it was only with great difficulty that sufficient water was obtained for the supply of our train. The remains of *metates* (corn-mills) are abundant about the ruins, and corn was doubtless the staple article of their existence, but none could now be raised here. The ruins of several large reservoirs, built of masonry, may be seen at Surouaro, and there are traces of acequias, which led to these, through which water was brought perhaps from a great distance. At first sight the difficulties in the way of obtaining a supply of water for any considerable population at this point would seem insurmountable, and the readiest solution of the problem would be to infer a change of climate, by which this region was made uninhabitable. Such a conclusion is not *necessary,* however, for the skill and industry of the ancient inhabitants of the arid table lands of New Mexico and Arizona achieved wonders in the way of procuring a supply of water. Sometimes this was done by carefully collecting, in cisterns of masonry, every drop of a trickling spring;

sometimes, by canals, through which water was brought from long distances."

Still later Captain Macomb reports:

"Some two miles below the head of Labyrinth Canyon we came upon the ruins of a large number of houses of stone, evidently built by the Pueblo Indians, as they are similar to those on the Dolores, and the pottery scattered about is identical with that before found in so many places. It is very old but of excellent quality, made of red clay coated with white, and handsomely figured. Here the houses are built in the sides of the cliffs.

"A mile or two below we saw others crowding the inaccessible summits—inaccessible except by ladders—of picturesque detached buttes of red sandstone, which rise to the height of one hundred and fifty feet above the bottom of the canyon. Similar buildings were found lower down, and broken pottery was picked up upon the summits of the cliffs overhanging Grand River; evidence that these dreadful canyons were once the homes of families belonging to that great people formerly spread over all this region now so utterly sterile, solitary, and desolate."

Since the day of Macomb there has been considerable scientific exploration carried on in southeastern Utah. Some of this work has been done under the auspices of the University of Utah, and some by the Smithsonian Institution, under the direction of the Bureau of American Ethnology.

In 1908, an expedition, under the personal direction of Professor Byron Cummings of the University of Utah, and Alfred Vincent Kidder, of the School of American Archaeology, set forth from Monticello, with two students as aids, and a cattleman as guide, for the purpose of exploring the western tributary of Montezuma Creek, in the southeastern portion of San Juan County, and also finding a ruin which they could excavate. They were

later joined by two students from Harvard who materially aided in the work of excavation. From a report by Professor Kidder the following facts are gleaned:

Montezuma Canyon is a deep and rather narrow valley, which heads in the eastern slopes of the Sierra Abajo or Blue Mountains, and flows in a southerly direction some forty-five miles before emptying into the San Juan River. Its eastern tributaries drain the long mesa which separates it from the McElmo-Yellow Jacket system of canyons, while on the west its upper tributaries all head against the eastern and southern slopes of the Abajos. These upper western tributaries were the ones explored. They are smaller replicas of the Montezuma itself, being, in most places, narrow, gorge-like canyons, with barren, sandy bottoms and abrupt cliff-like sides. There are three principal canyons, the most northward being Long Canyon, followed by Devil and Alkali Canyons. The latter canyon, for some 15 or 20 miles, runs almost parallel to Montezuma, before it eventually enters it, thus forming a narrow mesa, called Alkali Ridge, between Alkali and Montezuma. The country in the region is so split up and broken, and presents such a tangle of steep gullies, cliffs, and precipitous ravines, that many weeks would be necessary for its complete exploration.

Three well-defined groups of ancient dwellings were found, viz., (1) Cliff-dwellings, (2) Canyon-head dwellings, and (3) Pueblos.

Cliff-dwellings of every conceivable sort and situation were found, all, however, of small size. The simplest type is a small natural cave made into a single room by the addition of a wall, closing in the front. The largest did not contain more than eight or ten rooms, while the majority were merely single- or double-room structures, their roofs and back walls usually being supplied by the cave cliff in which they were built.

All these buildings show much ingenuity in construction and reveal the adaptability and resourcefulness of their builders. Yet the masonry is exceedingly crude, the stones evidently being picked up at random, laid without any attempt at coursing in adobe, and afterwards plastered on both sides with adobe roughly laid on by the hand or a rude wooden implement. Wooden beams are sometimes incorporated into the masonry.

In one house in Devil Canyon, a fine specimen of ancient "reinforced concrete" was found. This was a wall begun after the manner of a picket fence, by placing upright, and about a foot apart, a number of slim cedar poles. These were then wattled together with twigs and osiers, making a fairly close and basket-like surface, which was then coated inside and out with adobe until the whole had the thickness of three inches.

The doors of the cliff-dwellings averaged the following dimensions: height 22½ inches, width 15 inches, thickness of wall 11 inches, height from floor of room 20 inches. They are usually fitted with a slab of sandstone for a sill, while the lintels are made either of a similar slab or of several small wooden rods sunk in the masonry of the jambs. A single rod about an inch below the middle of the lintel answered as a rest for the stone-slab which served as a door.

Owing to the absence of Kivas, or sacred ceremonial rooms, from these ruins, Professors Cummings and Kidder were in doubt as to whether they were continuously inhabited. They say:

"Whether they were lookout places, granaries, or shelters from which to watch the cornfields, are questions which it is better to leave open until more complete data as to their exact topographical situation and their relations one to another and to the larger pueblo groups can be collected."

The pueblos were nearly all found on the tops of the

cedar-covered mesas between the canyons. Over twenty groups were mapped in a small section of Alkali Ridge alone. All are badly ruined, so that they appear merely as low mounds thickly strewn with building stones and heavily over-grown with sagebrush and greasewood. They are usually situated on the crest of a ridge some distance back from the rims of the canyons, thus occupying the highest ground in the immediate vicinity. In each of these groups one or more Kivas were found, near which were always located the burial places of the dead. Many of these had been dug into by relic-seekers and pot-hunters, and rendered utterly useless for purposes of scientific exploration, hence the party was highly delighted to find on Alkali Ridge a large group of ruins, with two burial mounds, one of which was intact, and the other only slightly disturbed. Excavations were carried on for five weeks, under considerable difficulties and limitations, but seventeen rooms and three Kivas were successfully laid bare. About 400 museum specimens were procured, among them being thirty pieces of unbroken pottery. The appearances indicated that the buildings originally were but two stories high and spread over considerable ground, entirely different from the terraced pueblos, the cliff-dwellings placed in inaccessible places, the pueblos of the McElmo canyon, where the houses had a tall backwall without ground-floor doorways, and such compact pueblos as those found in the Chaco Canyon, all of which were capable of ready and comparatively easy defense. These scattered dwellings, however, have no strategic advantage in their location, and they are so loosely strung together that no combined resistance to a sudden attack could have been made.

The masonry, too, was poor, the building rocks being rough and shapeless, and laid without any semblance of coursing. Most of the rooms were fairly uniform in size, averaging about ten feet by five feet. The easternmost

chamber, which evidently had been used for a granary, was twenty-three feet long. Evidently a great fire had once raged here, oxidizing a large quantity of corn on the cob; vitrifying, and in some places turning almost into a sort of iridescent slag, parts of the adobe walls and ceiling. In some places cedar posts were incorporated as parts of the lower walls, though only charred remains and the marks of the bark in the adobe were left to tell of their former presence. The finds in the living rooms were meager, suggesting, at least, the possibility of the inhabitants having removed elsewhere.

In this pueblo there were forty and possibly more Kivas or sacred ceremonial chambers, all found underground, with clear evidences that they had been roofed. These Kivas doubtless were added one by one as more clans were added to the pueblo and more houses, needed, by the marriage of the maidens. For each clan needed its own Kiva for the performance of its own ceremonies, and a study of the Pueblo Indians of to-day, such as the Hopi, Zuni, Acoma, etc., demonstrate the supreme importance to the Indian mind of these strange, weird and primitive performances.

The two burial places examined yielded considerable material, though one had been much disturbed by irresponsible excavators. In the other, twenty-eight burials were uncovered, with accompanying pottery, ornaments and other objects. The majority of the bodies found were laid on their sides, the knees drawn up towards the chest, the elbows flexed on their sides, the hands placed in front of, or beside, the face. Pottery was found with about one skeleton in five, though one body had ten pieces. The only ornaments found were beads, made of olivella shells and pieces of hollow bone, all clearly used as necklaces.

From the main ruins were obtained pottery, pipes, ceremonial objects of stone and pottery; bone awls, skin-scrapers, and needles; beads of shell, bone, stone, and

pottery; stone-axes, polishing-stones, sandal-stones, and various kinds of chipped implements such as knives, spear-heads and projectile points. Owing to the exposed condition of the ruins no objects of basketry, textiles or wood were found, and there was no trace of metal.

Another type of ruins is found in the Yellow Jacket and Hovenweap region, which is not far from the one already described. Here, round towers, that might almost be called castles, are found. Towers are widely distributed in the southwest, but those of the Hovenweap district, in southeastern Utah, are in an excellent state of preservation and their masonry somewhat superior to that found elsewhere. While the ends of few roof and floor beams are occasionally found, there are no roofs actually in place but the assumption that some of these buildings were two and three stories high is supported by reasonable evidence. The towers vary, in that some are round, others rectangular, a few semicircular, some stand alone, and others have annexed rectangular rooms. In some cases, circular or semicircular towers are found within concentric walls, united by radiating partitions forming rooms, and in still other cases, a circular room or tower is enclosed in a rectangular room. There are also towers united to pueblos.

The stones of which these towers are built exhibit both the excellencies and defects of aboriginal masonry. Almost without exception they are of rudely dressed stone, the pits or markings having been made with stone hammers. They were laid in horizontal courses, but it is evident that tieing or bonding was not deemed essential or important, and the work is by no means even. The stones were laid in adobe mortar, and the spaces between the courses chinked with spalls, or small pieces of stone. Most of these, however, with much of the mortar, have been washed out by rains, and great numbers of them are found at the foot of the walls. Here and there the walls

are pierced with small openings, irregularly arranged, doubtlessly made by the omission of stones. As a rule these holes are lined with adobe plaster and rounded. Their directions are at all angles to the faces of the walls. Larger openings, as rectangular doorways and windows, also occur, with well-made stone lintels and thresholds. T-shaped doorways, or those in which the lower part is narrower than the upper, are found in the walls of upper stories. The foundations were not cut or excavated to a uniform level, but flat stones were introduced by the aboriginal builders anyhow and everyhow, wherever required to make the first course reasonably level. The angles of square and semicircular towers are plumb, their surfaces perpendicular, slanting slightly inward from base to top, and often showing a slight bulge, or curve, which adds to their picturesqueness. Sometimes both square and rectangular towers have their corners rounded.

Where rooms are attached to the towers they were generally planned for at the original building, but there are many evidences that rooms were often added later. The west wing of the building known as Hovenweap Castle consists of a semicircular tower, attached to which are four large rooms, arranged in a series, all with massive walls, two or more stories high.

In Square Tower Canyon a tall tower was found, mounted on an angular boulder, the upper surface of which slopes at a sharp angle. In spite of this a number of rectangular buildings were united to the tower, though the walls have now slid down the incline and fallen.

In Hackberry Canyon — a spur of Bridge Canyon — is found one of the concentric type. It is known as Horseshoe House, and it is supposed to be the form of many ruined masses found in the Yellow Jacket region. Sometimes the enclosed circular area is so large that it can scarcely be regarded as a simple tower. The larger space suggests the possibility of its having been the plaza

of a circular pueblo with concentric walls, sometimes numerous and connected with radiating partitions. It is interesting to note that the ruin mentioned by Padres Escalante and Dominguez, in 1776, belongs to this type.

The circular type of room, enclosed in rectangular walls, is the pure type of pueblo architecture characteristic of the Mesa Verde region in southwestern Colorado, according to Dr. J. Walter Fewkes, the eminent archaeologist and ethnologist of the Smithsonian Institution. He says:

"The word tower is used with a good deal of latitude by writers and is sometimes applied to the buildings considered in this group. Some of the towers in groups previously considered, judged from their size, might better be called castles or houses of defence; others have been regarded as observatories and as habitations. The unit form of the pure type of pueblo, also regarded as a tower, is a combined Kiva and habitation, morphologically speaking. The best example of a building of this character is Unit Type House, an instructive ruin situated in the Square Tower Canyon Group. Here there is one Kiva embedded in a mass of rectangular rooms, imparting to the ruin a general rectangular outline slightly modified by the presence of an annexed square room at one corner. Unit Type House is structurally the simplest form or nucleus of a pure pueblo type, and when several similar units are consolidated into a compact body of rooms the result is a considerable pueblo."

According to Dr. Fewkes, the most complicated architectural form reached in the highest development of pueblo architecture is found where towers are united to pueblos of the pure type. This is best found in its simplest form in the Hovenweap House. A more complex and better preserved example is found in the Castle, close by. There are several good examples found in the Yellow Jacket region.

The pure pueblo type consists of architectural units, each unit being a circular sunken chamber, which served as the sanctuary, or Kiva, embedded in rectangular rooms. This type exists singly or in multiple forms, isolated or united to others of its kind.

Dr. Fewkes has reached the conclusion that the tower is a prehistoric type, and that the few towers found by the first explorers in the inhabited regions were but survivals. He also thinks it possible that the modern circular Kiva may be a survivor in form of the ancient tower.

The most general, comprehensive, and popular survey that has yet been made of the prehistoric ruins of Utah, is found in Dr. Byron Cummings' bulletin entitled: *The Ancient Inhabitants of the San Juan Valley,* and to this, and the Reports of the Bureau of American Ethnology, the interested reader who desires further to inform himself is respectfully referred.

It should be noted, however, that discoveries of cliff- and cave-dwellings, ruined pueblos, etc., are still being reported in Utah.

Professor Levi Edgar Young, of the State University, has been tireless in his explorations and researches. He and his students, for a number of years, have gone out into the field, either for the purpose of exploration and discovery, or to excavate and study ruins already known. In 1917, an expedition was sent out, under the joint auspices of the Smithsonian Institution and the University of Utah, under the directorship of Neil M. Judd, a native of the State, and trained to his archaeological work by Doctor Cummings and Professor Young. He chose a well-known region, near Paragoonah, Iron County, Utah, where, as far back as 1872, when the Wheeler survey was being made, Dr. H. C. Yarrow reported that he had counted more than 400 mounds. As the years passed, extensive farming was carried on in the region, and doubtless, many mounds were destroyed, until in 1893, the

number was given as not more than 100. By 1915, this number had again been reduced by one half, when Mr. Judd first began his investigations, and, says he, "the number was still further reduced during the next twelve months, leaving a bare half-dozen large elevations in the fields already under cultivation and several smaller mounds in the sage-covered area adjoining."

While the work accomplished was of much profit to the scientific archaeologist, it must be confessed that there was nothing discovered of a spectacular nature, or anything to appeal keenly to popular interest. The inaccessible element of the dangerous-looking cliff-dwellings was lacking, and it is not easy for the dull imagination of mediocrity to visualize anything very exciting as having taken place in so unpicturesque a spot. Yet Mr. Judd gives a picture of a way the walls were made that will be new to most, if not all, of my readers.

"Much has been said regarding the manner in which these adobe dwellings were constructed. The builders required merely an abundant water-supply and the clayey soil of the region. A shallow hole near the site of the proposed house sufficed as a mixing box, into which water was poured as it was needed; the hole grew in extent and depth as its sides were cut down to furnish additional clay. This was undoubtedly mixed by the bare feet of the workers, a method still employed by modern Pueblo Indians and their Mexican neighbors.

"Balls of this mud, worked to a stiff paste, were then thrown on to a prepared area, tracing the outline of the room. Other masses were added, and the four walls gradually assumed their desired height. Of necessity these were built up in layers, for the cohesive properties of plastic clay are very low, and supporting forms were unknown among the primitive peoples of America. Each layer averaged about fifteen inches in thickness and the desert sun soon dried it sufficiently to permit of the addi-

tion of a superimposed course. The fact that these layers vary in thickness from a few inches to more than a foot may be traced usually to an effort on the part of the builders to maintain uniform levels. An unintentional irregularity in one layer would be corrected in placing the next above it. Mud plaster was ordinarily employed in smoothing the inner faces of these walls, but it is sometimes apparent that the freshly laid adobe was merely dampened with water and surfaced over, obliterating all traces of joints."*

A large number of bone, stone and other primitive implements were found during the process of excavation, together with seeds of various kinds, and fragments of basketry. These are all carefully preserved in the University of Utah Museum.

Since this work Mr. Judd has continued his archaeological researches in Utah, and as recently as June, 1920, reported some most interesting and important finds.

In closing this necessarily brief and inadequate chapter it may be as well to suggest to the reader a few broad and general conclusions commonly accepted by archaeologists as the result of their study of these prehistoric ruins up to the present time. These are:

1. They were made by a semi-pastoral people in a very primitive stage of culture, who were easily moved by drought, famine or troublesome enemies.

2. They built detached houses, unless for purposes of common defense they united their homes in one or more communal dwellings. This applied just as much to the cliff-dwellings as to the separate and communal houses on the level.

3. Even the most inaccessible of the cliff-dwellings were not necessarily places of defense or refuge. The sites happened best to meet the immediate needs of the

*Archaeological Investigations at Paragoonah, Utah. By Neil M. Judd, Published by Smithsonian Institution, 1919.

aborigines. Hence their occupancy of them. That, at times, they were occupied as places of defense is also equally certain.

4. But it does not follow that, because they were occasionally so used, they are to be regarded as the final place of refuge and defense of a desperately beset people, whose foes completely annihilated them.

5. On the other hand, tradition and archaeological evidences demonstrate that many of the cliff-dwellers and builders of the pueblos in the open, or on the level, were the ancestors of the present-day Pueblo Indians of Arizona and New Mexico.

6. These people were all agriculturists of a very rude and primitive character, unacquainted with any form of plough or other implement, save a simple corn-planting stick, and a rude hoe, though they understood irrigation, and have left many traces of ditches or reservoirs.

Joseph Smith, Jr.
The Founder of Mormonism

CHAPTER III

JOSEPH SMITH AND THE ORIGIN OF MORMONISM

When Joseph Smith was about fourteen years of age his father's family moved from Palmyra, N. Y., to Manchester, N. Y. About this time there was evinced a great deal of sectarian revival activity to make converts and add to the Church "such as should be saved." Joseph, a lad of sensitive nature, was naturally influenced by the emotionalism around him. His mother and three brothers and a sister had just joined the Presbyterian Church, but Joseph, though so young, was much perturbed about the different sects of the professed children of God. Why these divisions? Surely God cannot be the author of this confusion, he reasoned. If God has a Church in the Faith it will not be split up into factions. In his own words:

"While I was laboring under the extreme difficulties caused by the contests of these parties of religionists, I was one day reading the Epistle of James, first chapter and fifth verse, which reads: 'If any of you lack wisdom, let him ask of God, that giveth to all men liberally, and upbraideth not; and it shall be given him.' Never did any passage of Scripture come with more power to the heart of man than this did at this time to mine. It seemed to enter with great force into every feeling of my heart. I reflected on it again and again, knowing that if any person needed wisdom from God, I did; for how to act I did not know, and unless I could get more wisdom than I then had, I would never know; for the teachers of religion of

the different sects understood the same passages of Scripture so differently as to destroy all confidence in settling the question by an appeal to the Bible."

The more he thought over these words the more they affected him, until, finally, he decided to act upon them. Not far from his home was a beautiful grove, the foliage of which was dense enough to give him the seclusion he desired for private devotion. Here, on the morning of a clear spring day, he retired for definite prayer and communion with God, if such things were possible.

Let me now quote from the article of B. H. Roberts in the *Americana Magazine* on the "History of the Mormon Church."

"And now something strange happened. The youth had just begun timidly to express the desire of his heart in words, when he was seized upon by an invisible power that overcame him; his tongue was bound so that he could not speak. Darkness gathered about him and it seemed for a time that he was doomed to sudden destruction. He exerted all his powers to call upon God for deliverance from this enemy — not from a merely 'imaginary ruin,' as he assures us, 'but from the power of some actual being from the unseen world,' who possessed such strength as the youth had never before encountered. Despair seized upon him and he felt that he must abandon himself to destruction. At this moment of dreadful alarm he saw a pillar of light exactly over his head which shone out above the brightness of the sun, and began gradually descending towards him until he was enveloped within it. As soon as the light appeared, the youth found himself freed from the power of the enemy that had held him bound. As the light rested upon him, he beheld within it two personages, exactly resembling each other in form and features, standing above him in the air, one of these, calling Joseph by name, and pointing to the other, said: 'This is my Beloved Son, hear Him.'"

It gives evidence of the intellectual tenacity of Joseph Smith that in the midst of all these bewildering occurrences he held clearly in his mind the purpose for which he had come to the secluded spot, the object he had in view in seeking the Lord. As soon, therefore, as he could get sufficient self-possession to speak, he asked the Personages in whose resplendent presence he stood, which of the sects was right, and which he should join. He was answered that he must join none of them, for they were all wrong. And the Personage who addressed him said that all their creeds were an abomination in His sight; that those professors were all corrupt; that they drew near to Him with their lips, but their hearts were far from Him; that they taught for doctrines the commandments of men; they had a form of godliness, but denied the power thereof. Joseph was again forbidden to join any of these sects and at the same time received a promise that the fullness of the gospel would at some future date be made known unto him.

When he came entirely to himself he found that he was lying on his back, looking up to heaven. With the passing of the vision he was left without strength; but soon recovering from his weakness he returned home.

Now let the candid reader carefully think over these statements. Here was a boy not yet fifteen years of age, confessedly not extra learned, not remarkable in any way to his relatives or neighbors, yet seeing, feeling, there was something decidedly wrong about the multiplication of sects in the Church professedly divine and organized through divine authority. How many boys of fifteen years, no matter how well-educated, have begun to think on such matters? And is it not remarkable that, in this year of our Lord 1921, and for many years past, there has been a growing conviction in the minds of men of all churches, denominations, and creeds that it is a scandal and a disgrace to Christendom, that the professed follow-

ers of Christ cannot harmonize, get together, unite, and as one force, fight the armies of evil? The boy Joseph Smith was but a hundred years ahead of his time. Had he seen this vision in 1920, instead of 1820, the Methodist minister to whom he told it, instead of rebuking him and treating his communication with contempt, might have hailed him with delight, sent a telegram to the heads of the Interchurch Movement that an inspired leader had been found, and have prided himself upon his perspicacity and the good fortune that had brought the youth into his hands.

But, in 1820, he was far ahead of his time, and consequently received the contumely, scorn, and bitter hatred visited upon those who dare to speak before the people are prepared. The so-called "churches of the living God" seemed far more interested in proselyting and adding converts to their particular sects and in promulgating their differences than they were in trying to dwell in unity with each other.

Let my readers most clearly understand at this point, that it is upon the assumed truth of this vision and subsequent revelations alleged to have been made to Joseph Smith, that the Mormon Church, The Church of Jesus Christ of Latter-Day Saints, definitely, positively, unflinchingly takes it stand. Its leaders do not beg the issue, dodge it, or question it. They accept it as positively as the Roman Catholics accept the doctrines promulgated from the papal chair, the theosophists the commands of the masters, the Christian Scientists Mary Baker Eddy's text-book *Science and Health,* the Methodists the teachings of John Wesley, the Presbyterians the teachings of Calvin, or the Lutherans the teachings of the reformed monk of Luxemborg.

Let us hastily review the succeeding labors and experiences of Smith, as recorded and accepted by Mormons. For three years he received no further vision. During

this time he lived as other young men lived, doubtless neither better nor worse than his neighbors, though later on, he accuses himself of a "levity not consistent with that character which ought to be maintained by one who was called of God as I had been." Praying to God for forgiveness, one night, another vision appeared to him. This time it was the angel Moroni, who announced "that God had a work for me to do; and that my name should be had for good and evil among all nations, kindreds and tongues, or that it should be both good and evil spoken of among all people." He also revealed that "there was a book written upon gold plates, giving an account of the former inhabitants of this continent, and the source from which they sprang. He also said that the fullness of the everlasting gospel was contained in it" and that with the book would be found two stones in silver bows — the Urim and Thummim — which would enable him to translate the book.

Again and yet again Moroni appeared to him with the same revelation, and on a fourth occasion he commanded Joseph to tell everything he had heard to his father. He did so, and then further obeying the commands of Moroni, he went to the hill where the sacred book was said to be. It was near to Manchester, Ontario county, New York, and is known as the hill *Cumorah*. Here, in a stone box, the plates, etc., were found, but he was not allowed to remove them. Instead, each year for four years, he was required to visit the place, after which he was to take away the plates. Accordingly, on September 22, 1827, he went for that purpose, and secured them. The news led to strenuous efforts on the part of enemies to get them away from him, and to frustrate these efforts he decided to move into Pennsylvania. A friend, Martin Harris, advanced him $50.00 for this purpose, and it was this same Harris that afterwards wrote part of the translation of the book, at Joseph's dictation. But when about one

hundred and sixteen pages had been written, Harris' desire to show the manuscript overcame Joseph's reluctance, and after many pledges, Harris was allowed to take the manuscript away. Violating his pledges, those to whom he wrongfully showed the writings stole them from him.

To frustrate the evil designs of these thieves Joseph received a revelation in which the Lord rebuked him and forbade him attempting to retranslate that which had been written, but instructed him to translate from the "Smaller Plates of Nephi," which contained a fuller history for the period covered by the first translation, which had been made from Mormon's abridgment of the "Larger Plates of Nephi."

At the same time a new scribe, in the person of Oliver Cowdery, was sent to Joseph. Persecutions also began to be showered upon Joseph and his discovery of the plates denounced as a fraud.

"Revelations" now came speedily one after another. One restored the Aaronic Priesthood, "which holds the keys of the ministering of angels, and of the Gospel of repentance, and of Baptism by immersion for the remission of sins;" then came the Priesthood of Melchizedek; other revelations guided Joseph in his relations with his family and followers, the organization of the Church, the publication of the Book of Mormon (which took place in 1830), and the public ministry of the newly organized church. At this time the spirit of persecution began to rage against the Mormons more furiously than hitherto it had done. The meetings were well attended, but when a public baptism by immersion was announced, the mob assembled, and that same night the prophet was arrested. After trial, in spite of all that vindictive hatred could produce against him, the accused was discharged. Yet the same night he was again arrested, again tried in another place, and again acquitted. From this time on, to the day of the prophet's murder in Carthage jail, June 27, 1844,

the persecutions never ceased. In spite of these malicious attacks, however, Joseph proceeded with his work. The sick were healed, not in one but in many cases; missionaries were sent to the Indians; preachings, conversions, and baptisms took place continually, and branches of the Church sprang up on every hand. One of these was at Kirtland, Ohio, and in 1831 Joseph removed thither, at which place new revelations were received pertaining to special individuals, the Shakers, spiritualism, and the enlarging work of the church. In June, the command came that Smith and certain elders should remove into Missouri, preaching on the way, two by two. Here, it was promised if they were faithful, the land of their inheritance, even the place for the city of the New Jerusalem, the holy city of Zion, should be revealed to them. On the second day of August, the first log was laid for a house, as a foundation for Zion, in Kaw township, twelve miles west of Independence. A site for a temple was chosen and dedicated. Joseph now returned to Kirtland, and in September, moved to Hiram, to the home of John Johnson and began a revision of the English text of the Bible, at the same time receiving most important "commandments and revelations." In the meantime the Missouri brethren had purchased a printing press and established a complete newspaper and book-making plant at Independence, where a monthly paper, *The Evening and Morning Star* was to be published. While at Hiram, a mob of fanatics tarred and feathered the prophet and Sydney Rigdon, yet the following morning, Joseph,— though scarified and defaced, — preached to the congregation as usual, for he had received a revelation that, for a time, he must personally proclaim the enlarged gospel he had received.

In April, 1832, he made his second trip to Zion (Missouri), but even on the journey he was followed by a mob that sought his injury or destruction, and he had to be

protected by the captain of the boat on which the party traveled.

The publication of *The Evening and Morning Star,* while it rejoiced the hearts of the Mormons, caused increased hostility towards them, for the editors of other papers, publishing the prospectus of the new paper, did it for the purpose of ridiculing it, or calumniating its editor and generally abusing the Mormons.

Looked at in the light of later and earthly wisdom the move into Missouri was an ill-advised one. Many among the Mormons were a progressive, active, alert people, with strong religious convictions, and avowed opponents of whiskey and slavery. These things in themselves were enough to provoke the active hostility of the less intelligent of the Missouri people, and especially of those whose hearts were wedded to slavery.

It was not long, therefore, before persecution burst forth with renewed fury. In July of 1833 the mob spirit was aroused to the height of murderous wrath by the fanaticism of bigoted zealots, and fanned by the spreading of injurious statements about the Mormons in the newspapers and by pamphlets. The outcome was a "Manifesto" issued by the people hostile to the Mormons, charging them with being fools and knaves for believing in their leaders and their alleged divine revelations; with poverty; with being of the dregs of society, lazy, idle and vicious; with tampering with their slaves and seeking to sow dissensions and raise seditions among them; with inviting free negroes and mulattos from other states to become Mormons and settle in Jackson County with them; with blaspheming God and casting contempt on His holy religion by pretending to receive revelations direct from heaven; by pretending to speak in unknown tongues by direct inspiration; and by diverse pretenses derogatory to God and religion, and the utter subversion of human rea-

son. This remarkable document, signed by many prominent citizens, then concludes:

"They (the Mormons) declare openly that their God hath given them this county of land and that sooner or later they must and will have possession of our land for an inheritance; and, in fine, they have conducted themselves on many other occasions, in such a manner, that we believe it a duty we owe to ourselves, our wives, and children, to the cause of public morals, to *remove them from among us,** as we are not prepared to give up our pleasant places and goodly possessions to them, or to receive into the bosoms of our families, as fit companions for our wives and daughters, the degraded and corrupt free negroes and mulattos that are now invited to settle among us.

"Under such a state of things, even our beautiful county would cease to be a desirable residence, and our situation intolerable. We, therefore, agree, that after timely warning, and receiving an adequate compensation for what little property they cannot take with them, they refuse to leave us in peace, as they found us — we agree to use such means as may be sufficient to remove them, and to that end we each pledge to each other our bodily powers, our lives, fortunes and sacred honors."

Needless to say the Mormons denied the charges about slaves, and that they had invited free negroes to join them, though they acknowledged their poverty and their revival of what they claimed was the New Testament religion. They asserted what, of course, all knew was the fact, that they had settled upon no lands their own money had not purchased, and indignantly disclaimed that they had ever had any intention to do otherwise.

But mobs are not made to listen to reason. Prejudice, hatred and violence are the forces that make mobs possible. This Missouri mob, on the 20th of July, 1833,

*The italics are mine—George Wharton James.

destroyed the printing plant at Independence and pulled down the building which housed it, then proceeded to tar and feather Bishop Partridge, Charles Allen and others, while men, women, and children, driven from their homes by awful threats, scattered through the thickets, cornfields, woods and groves like hunted partridges.

The Mormons claim that during all these illegal proceedings the Lieutenant Governor of the state, Lilburn W. Boggs, stood by, calmly looking on, and saying to the victims: "You now know what our Jackson boys can do, and you must leave the county."

Three days later the mob met again, and, realizing the determined character of its leaders and the sad fact that they could look for no protection from the duly constituted officers of the law, the Mormon leaders entered into an agreement to leave the county within a certain time.

They then appealed to the Governor of the state, Daniel Dunklin, and in due time received a letter from him containing the usual platitudes about ours being a country of laws and justice. He then continues:

"Not being willing to persuade myself that any portion of the citizens of the state of Missouri are so lost to a sense of these truths as to require the exercise of *force,* in order to ensure a respect for them, after advising with the Attorney-General and exercising my best judgment, I would advise you to make a trial of the efficacy of the laws. The judge of your circuit is a conservator of the peace; if an affidavit is made before him by any of you, that your lives are threatened, and you believe them in danger, it would be his duty to have the offenders apprehended, and bind them to keep the peace."

Following this advice from the highest executive authority in the state, engaging counsel to prosecute their suits, simply served further to enrage the mob,— and I use the word advisedly, though it included many of the leading citizens, even Christian ministers by profession,

of the county — so that on the 31st of October, armed men unroofed and partially demolished the dwelling-houses at a Mormon settlement on the Big Blue, whipped the men and drove out the women and children. The following days saw outrages at the prairie settlement, about twelve miles from Independence, and in the latter city itself. Every attempt at self-defense on the part of the Mormons served to enrage the mob the more, and dire threats were made as to what would happen the following Monday. Arming themselves, some of the Mormons sought to protect their homes, wives and children. In a bloody battle that followed two of the mob and one Mormon were killed. This started open conflict so that the militia was called out, and both sides now being in a desperate state of mind it was hard to find wise counsel anywhere. To preserve the peace, however, Lieutenant-Governor Boggs advised disarmament. According to the Mormons this was but a subterfuge to take away their weapons and thus leave them unprotected. Anyhow it worked out that way, and the militia now became the active instruments of mob violence, destroying houses and other property, and driving out men, women and children, so that they actually fled for their lives. Some crossed the Missouri River, others fled to Clay, Van Buren and Lafayette counties, but wherever they went, it was made clear they were not wanted. Petitions were again sent to the Governor asking for protection, and — in accordance with a suggestion received from the Attorney-General of the state — also asking that they might be allowed "to organize into companies of Jackson guards and be furnished with arms by the state, to assist in maintaining their rights against the unhallowed mob of Jackson County."

At about this time, the prophet, who had been on an extended mission to Canada, returned and forwarded the following letter to the suffering saints in Missouri. I

give it in full, in order that my readers may see the style of his communications, and also that they may see the workings of his mind upon so complex and difficult a situation:

"Kirtland Mills, Ohio,
"December 10, 1833.

"Edward Partridge, W. W. Phelps, John Whitmer, A. S. Gilbert, John Corrill, Isaac Morley, and all the Saints whom it may concern:

"Beloved Brethren: — This morning's mail brought letters from Bishop Partridge, Elders Corrill and Phelps, all mailed at Liberty, November 19th, which gave us the melancholy intelligence of your flight from the land of your inheritance, having been driven before the face of your enemies in that place.

"From previous letters we learned that a number of our brethren had been slain, but we could not learn from the letters referred to above, that there had been more than one killed, and that one Brother Barber; and that Brother Dibble was wounded in the bowels. We were thankful to learn that no more had been slain, and our daily prayers are that the Lord will not suffer His Saints, who have gone up to His land to keep His commandments, to stain His holy mountain with their blood.

"I cannot learn from any communication by the Spirit to me, that Zion has forfeited her claim to a celestial crown, notwithstanding the Lord has caused her to be thus afflicted, except it may be some individuals who have walked in disobedience, and forsaken the new covenant, all such will be made manifest by their works in due time. I have always expected that Zion would suffer some affliction, from what I could learn from the commandments which have been given. But I would remind you of a certain clause in one which says, that after much tribulation cometh the blessing. By this, and also others, and also one received of late, I know that Zion, in the due

time of the Lord, will be redeemed; but how many will be the days of her purification, tribulation, and affliction, the Lord has kept hid from my eyes; and when I inquire concerning this subject, the voice of the Lord is: Be still, and know that I am God, all those who suffer for my name shall reign with me, and he that layeth down his life for my sake shall find it again.

"Now, there are two things of which I am ignorant, and the Lord will not show them unto me, perhaps for a wise purpose in Himself, I mean in some respects, and they are these: Why God has suffered so great a calamity to come upon Zion, and what the great moving cause of this great affliction is; and again, by what means he will return her back to her inheritance, with songs of everlasting joy upon her head. These two things, brethren, are in part kept back that they are not plainly shown unto me; but there are some things that are plainly manifest which have incurred the displeasure of the Almighty. When I contemplate upon all things that have been manifested, I am aware that I ought not to murmur, and do not murmur, only in this, that those who are innocent are compelled to suffer for the iniquities of the guilty; and I cannot account for this, only on this wise, that the saying of the Savior has not been strictly observed: 'If thy right eye offend thee, pluck it out, and cast it from thee; or if thy right arm offend thee, cut it off, and cast it from thee.' Now the fact is, if any of the members of our body are disordered the rest of our body will be affected with it, and then all are brought into bondage together; and yet, notwithstanding all this, it is with difficulty that I can restrain my feelings when I know that you, my brethren with whom I have had so many happy hours, sitting, as it were, in heavenly places in Christ Jesus; and also, having the witness which I feel, and ever have felt, of the purity of your motives, are cast out, and are as strangers and pilgrims on the earth, exposed to hunger,

cold, nakedness, peril, sword, I say when I contemplate this, it is with difficulty that I can keep from complaining and murmuring against this dispensation; but I am sensible that this is not right, and may God grant that notwithstanding your great afflictions and sufferings there may not anything separate us from the love of Christ.

"Brethren, when we learn your sufferings, it awakens every sympathy of our hearts; it weighs us down; we cannot refrain from tears, yet, we are not able to realize, only in part, your sufferings; and I often hear the brethren saying, they wish they were with you, that they might bear a part of your sufferings and I myself should have been with you and had not God prevented it in the order of His providence, that the yoke of affliction might be less grievous upon you, God having forewarned me, concerning these things, for your sake; and also, Elder Cowdery could not lighten your afflictions by tarrying longer with you, for his presence would have so much the more enraged your enemies; therefore God hath dealt mercifully with us. O brethren, let us be thankful that it is as well with us as it is, and we are yet alive and peradventure, God hath laid up in store great good for us in this generation, and may grant that we may yet glorify His name.

"I feel thankful that there have no more denied the faith; I pray God in the name of Jesus that you all may be kept in the faith unto the end; let your sufferings be what they may, it is better in the eyes of God that you should die, than that you should give up the land of Zion, the inheritances which you have purchased with your moneys; for every man that giveth not up his inheritance, though he should die, yet, when the Lord shall come, he shall stand upon it, and with Job, in his flesh he shall see God, therefore, this is my counsel that you retain your lands, even unto the uttermost, and employ every lawful means to seek redress of your enemies; and pray to God,

day and night, to return you in peace and in safety to the lands of your inheritance; and when the judge fail you, appeal unto the executive; and when the executive fail you, appeal unto the president, and when the president fail you, and all laws fail you, and the humanity of the people fail you, and all things else fail you but God alone, and you continue to weary Him with your importunings, as the poor woman did the unjust judge, He will not fail to execute judgment upon your enemies and to avenge His own elect that cry unto Him day and night.

"Behold, He will not fail you! He will come with ten thousand of His Saints, and all His adversaries shall be destroyed with the breath of His lips. All those who keep their inheritances, notwithstanding they should be beaten and driven, shall be likened unto the wise virgins who took oil in their lamps. But all those who are unbelieving and fearful, will be likened unto the foolish virgins, who took no oil in their lamps: and when they shall return and say unto the Saints, give us of your lands, behold, there will be no room found for them. As respects giving deeds, I would advise you to give deeds as far as the brethren had legal and just claims to them, and then let every man answer to God for the disposal of them.

"I would suggest some ideas to Elder Phelps, not knowing that they will be of any real benefit, but suggest them for consideration. I would be glad if he were here, were it possible for him to come, but dare not advise, not knowing what shall befall us, as we are under very heavy and serious threatenings, from a great many people in this place.

"But, perhaps, the people in Liberty may feel willing, God having power to soften the hearts of all men, to have a press established there; and if not, in some other place; any place where it can be the most convenient, and it is possible to get to it; God will be willing to have it in

any place where it can be established in safety. We must be wise as serpents and harmless as doves. Again, I desire that Elder Phelps should collect all the information, and give us a true history of the beginning and rise of Zion, and her calamities.

"Now hear the prayer of your unworthy brother in the new and everlasting covenant: O my God! Thou who hast called and chosen a few through Thy weak instrument, by commandment, and sent them to Missouri, a place which Thou didst call Zion, and commanded Thy servants to consecrate it unto Thyself for a place of refuge and safety for the gathering of Thy Saints, to build up a holy city unto Thyself; and as Thou hast said that no other place should be appointed like unto this, therefore, I ask Thee in the name of Jesus Christ to return Thy people unto their houses and their inheritances, to enjoy the fruit of their labors; that all the waste places may be built up; that all the enemies of Thy people, who will not repent and turn unto Thee, may be destroyed from off the face of the land; and let a house be built and established unto Thy name, and let all the losses that Thy people have sustained, be rewarded unto them, even more than four fold, that the borders of Zion may be enlarged forever; and let her be established no more to be thrown down; and let all Thy Saints, when they are scattered as sheep, and are persecuted, flee unto Zion, and be established in the midst of her; and let her be organized according to Thy law and let this prayer ever be recorded before Thy face. Give Thy Holy Spirit unto my brethren, unto whom I write; send Thine angels to guard them, and deliver them from all evil; and when they turn their faces toward Zion, and bow down before Thee and pray, may their sins never come up before Thy face, neither have place in the book of Thy remembrance, and may they depart from all their iniquities. Provide food for them as Thou doest for the ravens;

provide clothing to cover their nakedness, and houses that they may dwell therein; give unto them friends in abundance and let their names be recorded in the Lamb's book of life, eternally before Thy face. Amen.

"Finally, brethren, the grace of our Lord Jesus Christ be with you all until His coming in His kingdom. Amen.

JOSEPH SMITH, JR."

The Governor's communications having seemed to be so fair and impartial, some of the Mormons finally agreed to go to Independence, in spite of the threats of the mob, under protection of a guard provided by the Governor's order. But on their arrival they found all hope of criminal prosecution under orderly processes of law at an end. Instead, the Attorney-General was sent by the Governor to "investigate," but the mob reassembled and clearly showed by its implacable spirit that neither the civil law nor even the influence of the executive could change their purpose. This was the farcical ending of all attempts by the officers of Missouri to bring the offenders against the Mormons to justice.

Accordingly a petition, (a second one), was sent to the President of the United States, and a request made to Governor Dunklin that he join in the appeal of the Mormons. The Governor responded that he would examine the petition and support it if he deemed it advisable, and wound up his letter with the following remarkable paragraph:

"Permit me to suggest to you, that as you now have greatly the advantage of your adversaries in public estimation, there is a great propriety in retaining that advantage, which you can easily do by keeping your adversaries in the wrong. The laws, both civil and military, seem deficient in affording your society proper protection; nevertheless, public sentiment is a powerful corrector of

error, and you should make it your policy to continue to deserve it."

The movements of the mobs in Missouri seemed to affect the people in far-away Kirtland. The walls of the new temple that were being built had to be watched at night to prevent their being destroyed. Yet this did not prevent the prophet from setting out on a missionary journey through western New York, which was no sooner accomplished than he started, May 5, 1834, with what was called "Zion's Camp" for the relief of the persecuted saints in Missouri. They marched through Ohio, Indiana, Illinois and finally reached the region of distress about the 19th of June, having had many interesting experiences on the journey. The party by this time had enlarged to over two hundred men, with twenty-five baggage wagons. That night five armed men rode into camp and told the Mormons they would "see hell before morning," that sixty men were coming from Richmond, Ray County, and seventy more from Clay County, to join the Jackson County mob, who had sworn their destruction. That night, however, a fearful rain- and hail-storm swept the country, and while it did little damage to the Mormons, it scattered the mob in confusion.

Negotiations were again begun between the citizens of Missouri and the Mormons, as it was clear that the pledges of the Governor to replace the Mormons upon their lands, and to return their weapons to them, would not be fulfilled, and the hostility of the mob had not abated. Matters were considerably hurried by the breaking out of cholera among the members of Zion's Camp. The prophet at first sought to stop the death ravages by laying on of hands and prayer, as he had many times done in the past with eminent success, but he found that the power was taken from him, and he publicly announced

that the plague was a direct visitation upon the people for their sins. For four days the disease raged, sixty-eight being afflicted, of whom fourteen died.

A few days later, recognizing the indisposition of the Governor to help resecure their lands, and the continued hostility of the people, and to prevent bloodshed, Joseph authorized the disbanding of Zion's Camp, and about the same time a general appeal was sent out by the Church for peace, justice and protection. In spite of all opposition, all persecution, and every indication to the contrary, the prophet still was assured that God intended the chosen spot in Jackson County, Missouri, to be Zion, the gathering place of the saints. In 1835 he informed the twelve apostles that "It was the will of God that they should take their families to Missouri next season."

During these trying times, which might well have distracted the attention of any man, the prophet continued in his work of caring for the Church, translating certain Egyptian records that had come to him, lecturing for the elders, rebuking, counseling, and also studying Hebrew and Greek.

In March, 1836, the temple at Kirtland, Ohio, was dedicated, and the thousand saints present were doubtless surprised to find the prophet himself, and the two elders, Rigdon and Cowdery, acting as ushers in seating them. Besides those seated there was a vast crowd outside who could not be admitted for lack of room, so an overflow meeting was held in the school-house.

The services began by the reading of the 96th and 24th psalms, after which there were hymns and prayer in the usual manner. It will be a great surprise to many Methodists, and other Protestants, that one of their favorite hymns was written by a Mormon, W. W. Phelps, and was first sung at the dedication of this temple. These are the words:

"O happy souls, who pray
Where God appoints to hear!
O happy saints, who pay
Their constant service there!
We'll praise Him still
And happy we
Who love the way
To Zion's hill.

"No burning heat by day,
Nor blast of evening air,
Shall take our health away,
If God be with us there.
He is our sun,
And He our shade
To guard our head
By night or noon.

"God is the only Lord,
Our shield and our defense;
With gifts His hands are stored,
We draw our blessings thence.
He will bestow
On Jacob's race
Peculiar grace,
And glory, too."

Another of the popular hymns of the Mormons (which I have many times heard sung with great unction), written by the same author, was also sung on this occasion:

"Now let us rejoice in the day of salvation;
No longer as strangers on earth need we roam;
Good tidings are sounding to us and each nation,
And shortly the hour of redemption will come;

When all that was promised the Saints will be given,
And none will molest them from morn until even;
And earth will appear as the Garden of Eden;
And Jesus will say to all Israel, Come home.

"We'll love one another, and never dissemble,
But cease to do evil, and ever be one;
And while the ungodly are fearing and tremble,
We'll watch for the day when the Savior will come;
When all that was promised the Saints will be given,
And none will molest them from morn until even;
And earth will appear as the Garden of Eden;
And Jesus will say to all Israel, Come home.

"In faith we'll rely on the arm of Jehovah
To guide through these last days of trouble and gloom;
And, after the scourges and harvest are over,
We'll rise with the just when the Savior doth come.
Then all that was promised the Saints will be given,
And they will be crowned as the angels of heaven,
And earth will appear as the Garden of Eden,
And Christ and His people will ever be one."

The dedicatory prayer, offered on that occasion, is claimed to have been given by revelation to the prophet Joseph. Whatever its origin, it is a noble and majestic composition, full of wisdom and in the true spirit of supplication, faith and love.

In the meantime many of the victims of the persecutions in Missouri had moved into Caldwell, Daviess, and Carroll Counties, their chief settlement being at Far West in Caldwell, their hope being that, having moved into the untracked wilds, they would there at least be allowed to establish their homes and live in accordance with their own ideas. Those who had moved into Clay County were now requested to leave — this, however,

was done in a kind and considerate manner — and the mob of Daviess County was demanding the same of the Mormons who had settled there.

Events now began to move with greater rapidity. The hostility to the Mormons was increasing in Ohio, and not only that, but the prophet was meeting with fearful troubles of several serious kinds among his own people. The year 1837 was one of reckless speculation throughout the country, and some of the Mormons in Kirtland, unfortunately, were not strong enough in spiritual things to resist the temptation to make money swiftly. As the fruits of this spirit of selfishness, evil surmisings, fault-finding, disunion, dissension, and apostasy followed in quick succession, and a bank, largely organized by the saints, failed, owing to the speculations of one of its officers. Even some of the elect, the twelve apostles, were infected by the craving for easy money, and the whole Church began to suffer as from a blight. In this crisis Joseph did what nothing but inspiration or great statesmanship could have suggested. He sent a mission to England, and at the same time began to take positive steps to purge the Church of those who had backslidden, or apostatized, and Oliver Cowdery, Martin Harris and David Whitmer, the three first witnesses to assert the divine origin of the Book of Mormon, were all severed from the Church.

In the meantime, in spite of all hostility, the work progressed at Far West, Missouri, and it was much hastened in January, 1838, by the prophet's presence, he having been compelled to flee, with Sidney Rigdon, from Kirtland. On the following 4th of July, Sidney Rigdon was the orator of the day at the Independence Day Celebration at Far West, and his speech has ever since been condemned as being too bitter against the mobs, and wrong in spirit, as it contained threats as to what the Mormons would do did the mobs again assail them.

They were soon put to the test. The Mormons in Missouri now numbered about 12,000, and about 500 more, who had fled from Kirtland, soon joined them. The spirit of the mob is well described by Bancroft in his volume on Utah:

"Right or wrong, law or no law, and whether in accord with the letter or the spirit or constitution or government of the United States or not, the people of Missouri had determined that they would go to any length before they would allow the saints to obtain political ascendancy in that quarter."

The trouble really began at Gallatin, Daviess County, on the 6th of August, 1838. A state election was in progress and twelve Mormons appeared at the polls to vote. Peniston, a candidate for the legislature, made a violent harangue against them to the crowd assembled, and while the Mormons were firm in their resolve to cast their ballots, a tumult ensued in which some of the Mormons and mob were injured. This tumult led to serious consequences, for Joseph and others went to call upon a certain justice of the peace to inquire as to threats he had made, and on being asked by Joseph to write out a pledge to do the Mormons justice if they were brought before him, he, later, swore out a warrant for the arrest of Joseph and one of his companions. This arrest was made and consequently angered the Mormons, and at the same time urged on the mob spirit. Then, to add fuel to the fire, Governor Boggs, of Missouri, ordered out the militia. Again and again the mob threatened the Mormons of DeWitt, and the militia ostensibly prevented an uprising. But another event occurred at this time to increase the anger of the mob. The persecutions in Ohio had led the saints to flee from Kirtland, and they came to Missouri, to their appointed Zion. There were 105 families, comprising 529 souls, (256 males, 273 females). They had their teams and progressed in orderly fashion,

with various adventures more or less exciting until they arrived at their appointed destination. The arrival of so large a body of Mormons doubtless helped inflame the Missourians, and new mobs were raised, Mormon houses fired upon, and even the people shot at when they left their homes to secure food. Finally professed mediators came from the mob, promising that no harm should be done to the Mormons, and their property should be paid for, if they would leave. Seeing that justice could not be had either from the civil authorities or the militia, the Mormons decided to move, and in the face of incredible hardships set forth for Caldwell. Several died on the way.

But nothing contented the mobs of Missouri but complete routing of the Mormons. Driven to desperation, a band of them resisted the mob at Buncombe, where several on both sides were killed. This, of course, was magnified by the mob into "a massacre by the Mormons" and the Governor was again appealed to, and finally, on October 27, 1838, he issued the order which has sent his name down to posterity as that of a cruel executive. In this order to General Clark, he claims to have been credibly informed that the Mormons are "in an attitude of open and avowed defiance of the laws, and (that they have) made open war upon the people of the state." He then continues:

"Your orders are, therefore, to hasten your operations and endeavor to reach Richmond, in Ray County, with all possible speed. *The Mormons must be treated as enemies and must be exterminated or driven from the state,* if necessary, for the public good. Their outrages are beyond all description."

With such an attitude officially expressed against them one can well understand how the mob now treated the Mormons. Self-defense, of course, was treason to the state, to be ruthlessly crushed, hence, when about twenty-

eight of their number gathered together for self-protection at Haun's Mill, a mob of 240 came down upon them, and without warning, fired upon them, killing or mortally wounding eighteen, and then proceeded to rob the houses, wagons and tents of bedding and clothing, drove off horses and wagons, and, it is charged, even stripped the bodies of the slain.

Now a mob marched on Far West, where the Mormon militia was on guard, and through the treachery of the commanding colonel, the prophet, together with several of his leading men, was taken into custody. They were threatened with death, the orders were actually given to Brigadier-General Doniphan to take them into the public square at Far West and shoot them. To this wicked order from Samuel D. Lucas, Major-General Commanding, Doniphan returned the following reply:

"It is a cold-blooded murder. I will not obey your order. My brigade shall march for Liberty tomorrow morning, at 8 o'clock; and if you execute these men, I will hold you responsible before an earthly tribunal, so help me God."

Flagrantly insubordinate as was this conduct of General Doniphan's, he was never called to account for it, and the Mormons have ever remembered his brave and heroic defense of their prophet, when it was almost as much as his own life was worth to dare to take such a stand.

There now sprang up a rivalry among certain of the militia generals for possession of Joseph and the other distinguished prisoners, and undoubtedly it was owing to this fact that they were ultimately released, although they were tried before a hostile judge, held for further trial and confined in Liberty jail. The Missouri legislature meeting about this time, the case of the Mormons naturally excited much attention and took up much of its time. The letters or petitions written to the legis-

lature by the prophet are open, manly, upright pleas for nothing but fairness and justice. In the meantime the Mormons in the different counties in Missouri began to prepare for leaving the state, in accordance with the governor's order. The year 1839 was a sad one for them. Where should they go? Their chief shepherd in jail, and kept there, contrary to law, month after month, they knew not what to do. In April, the prisoners were removed to Gallatin, Daviess County. The following day their "trial" began. They were held over, but a few days later secured a change of venue to Boone County. The guard that was charged with the duty of taking the prisoners got drunk, and thus gave them an opportunity to escape, which they did.

At almost the same time the mob was destroying the property abandoned by the saints at Far West, the latter having decided to remove to Quincy, Illinois, where on Monday, April 22, the prophet himself arrived. Immediately he set to work to find a home for his persecuted flock, yet, in spite of this absorbing work, he found time to dictate history, hold conferences with officials and individuals, help select hymns for the Mormon hymn-book, administer to the sick and do the thousand and one things a true pastor is ever ready to do for his people. Commerce was chosen as a site, though it was supposed to be an unhealthful location. This was soon included in a larger location which was named Nauvoo. While the saints were at work establishing their homes here the prophet, together with Sidney Rigdon, Elias Higbee and Orrin P. Rockwell, were sent as a delegation to Washington to seek redress for the wrongs perpetrated upon the Mormons in Missouri. It may be as well to state here that, in spite of much expressed sympathy, the Federal government from President Martin Van Buren down, refused to act, placing the whole responsibility upon the State of Missouri. It can well be understood that timid

politicians, seeking votes and influence, would not care to antagonize a whole state. Hence Joseph, though sadly disappointed, soon returned, to devote his attention to the building up of Nauvoo. Remembering all the experiences of the past, he drew up a charter, which all who have examined it pronounce a master-piece. It was passed through the state legislature without any great influence, yet in after years the astutest lawyers of the country professed to believe that no such charter could have been gained save by undue, or remarkably powerful, influence. By it the city was given unusual control over its own affairs. Rapidly the city grew. The politicians were anxious to conciliate so large a body of people, and each political party sought to win the support of the Mormons.

In the meantime the twelve apostles in England were having a wonderfully successful time, and cheered the hearts of the saints by their reports of large numbers of conversions and baptisms.

Then, June 4, 1841, Joseph was arrested on a demand from Missouri, but a writ of *habeas corpus* was obtained in Quincy, and Judge Stephen A. Douglas, (afterwards the noted disputant with Lincoln), happening to come into Quincy, appointed a hearing on the following Tuesday, in Monmouth, Warren County. At the hearing, Joseph was liberated, much to the delight of the saints.

Soon after this, (September 1st), Joseph preached a sermon that, in the light of present day thought, can be regarded as nothing less than remarkable. Said he:

"I preached to a large congregation — desiring to persuade the saints to trust in God when sick, and not in an arm of flesh, and live by faith and not by medicine, or poison; and when they were sick, and had called for the Elders to pray for them, and they were not healed, to use herbs and mild food."

A legion of militia was organized at Nauvoo, of which

Joseph was elected Lieutenant-General. This was a move towards self-protection, in view of the inability shown by the authorities in Missouri to control the mobs.

The next few months were full of excitement, at times, for the prophet, for in them the wickedness and duplicity of Dr. John C. Bennett, one of the fiercest of those who have assailed the prophet and Mormonism, was revealed, and, of course, it was necessary to disfellowship him, though he had held the confidence of the Mormons from the prophet down. Then two attempts were made to extradite Joseph to Missouri, one on a charge that he was accessory to an attempted murder of Governor Boggs, the other by the resuscitation of an old charge of "murder, treason, burglary, theft, etc.," by the action of the traitor and exposed scoundrel, Bennett. To be arrested, released on *habeas corpus,* and again arrested and released, with all the attendant excitement, showed how determined the enemies of Joseph were to get him in their power.

It was during these troublous times that Joseph prophesied, (August 6, 1842), that the saints would continue to suffer much affliction and would be driven from their homes. Many would apostatize, others would be put to death by persecutors or lose their lives in consequence of exposure or disease, and some would live to go and assist in making settlements, and build cities, and see the saints become a mighty people in the midst of the Rocky Mountains.

On the 23rd of June the prophet was again arrested by a sheriff of Jackson County, Missouri, aided by a sheriff belonging to Illinois. Fortunately passers-by heard the prophet's call for help, and a writ of *habeas corpus* was sued out, and after the usual legal squabble, complicated by writs for the arrest of the two sheriffs, Joseph was taken to Nauvoo and there released. The outcome of this was that the two sheriffs made applica-

tion for a posse, to retake the prophet, but Governor Ford of Illinois refused the request, and also wrote to the Governor of Missouri stating why he had done so.

Agitation now began in Carthage and other places in Illinois, to drive out the Mormons, as had been done in Missouri. Many reasons for this can be given, but they have all been referred to. Jealousy may have had a place, and fear of the power of the growing city of Nauvoo, for it must not be forgotten that "in four years it rose from a warehouse or two and a few half-tumbled-down shacks on the banks of the river to the dignity of being the first city in Illinois in population and commercial enterprise, and also gave promise of developing into a manufacturing center of great importance."

With a vision of the saints engaged in every kind of constructive work, quickened, doubtless, by the presence of accomplished artisans from England, Scotland, the north of Ireland, as well as from eastern manufacturing centers, the prophet saw the river damned to give power for every kind of factory, and buildings arising on every hand, and had he lived, and the persecutions ceased, there is no telling what might have developed.

But Fate ordered otherwise. The almost illimitable powers granted by the legislature in the Nauvoo charter were to produce greater evils than they were designed to prevent. Much of the city legislation based upon this charter was ill-advised and extravagant. It really made the city an independent republic within the republic, and with almost as much power, constitutionally, as the state itself possessed. It can well be imagined with what disfavor and ill-will other and competing cities looked upon Nauvoo. Furthermore, the trickery of politicians, seeking their own advancement, led to false steps being taken which had disastrous results. In addition, the Church, as never before, it seemed, was cursed with dissensions and apostasy. It cannot be regarded, too, as anything but

unfortunate, that the Mormons held the balance of political power in Illinois. Each party sought their aid, but as Governor Ford later remarked, "they were willing and anxious for the Mormon votes at elections, but they were unwilling to risk their popularity with the people, by taking part in their favor, even when law, and justice, and the constitution were all on their side."

Perhaps the most jealous of all the cities of the growing power of Nauvoo was Carthage. This is clearly shown in a "Preamble and Resolutions" passed at an anti-Mormon meeting held there September 6, 1843. In this paper the Mormons are spoken of as being either equally reckless and unprincipled as the prophet himself, "or else made his pliant tools by the most absurd credulity that has astonished the world since its foundation."

Hence, when certain leaders of the Church apostatized and started the publication of a paper, *The Expositor,* in Nauvoo, which was unlimited in its abuse of the prophet and his followers, and the City Council destroyed the paper and its printing-plant, on the ground that it was a public nuisance, this high-handed and very unwise proceeding was used by the Carthage people as another proof of the lawlessness of the prophet and his followers. The owners of *The Expositor* swore out warrants for the arrest of Joseph and the City Council. He applied to the Municipal Court for a writ of *habeas corpus,* which was granted, and he was released. This fired the mob spirit not only in Carthage but in Warsaw, and when it was known that mobs were coming to Nauvoo to seize the prophet, he, as Lieutenant-General of the Nauvoo Legion, and Mayor, placed the city under martial law. The excitement became so intense that Brigham Young and all the apostles were called from their eastern missions. Governor Ford also came to Carthage to see for himself the state of affairs. Joseph invited him to come to Carthage and make a thorough investigation, but for

the time being Ford seemed to have come under the influence of Joseph's enemies. When it was known the mob was coming, the prophet declared that if he and his brother Hyrum were taken they would be massacred, and his friends were so urgent for his safety that he and several others started with the intention of fleeing to the Rocky Mountains. But the prophet's wife sent a messenger to him urging him to come back, and this plea was enlarged by others who declared that Governor Ford had pledged him protection. To these pleas Joseph replied: "If my life is of no value to my friends it is of none to myself," and he immediately returned. As soon as he was in Nauvoo, however, he learned that Governor Ford had rescinded his promise of a guard to protect him and at the same time demanded his immediate presence in Carthage for trial. On June 25, 1844, Joseph and his brother, and all the others charged with riot in the destruction of *The Expositor,* gave themselves up to Constable Bettisworth. Again they were pledged protection by the Governor. Soon after they were in the constable's hands Joseph and Hyrum were served with another writ, charging them with treason. At the trial on the riot charge the defendants were bound over, but as they left the court Joseph and Hyrum were re-arrested on a false mittimus. The Governor was appealed to, but refused to interfere, and therefore, they were taken to jail. A number of their friends were allowed to go with them. The night was spent together. The following day the prophet had an interview with the Governor in the jail, in which the former urged that if the Governor went to Nauvoo he be taken along, as he was sure his life was in jeopardy if he was compelled to remain in Carthage.

This proved to be only too true. Two days later the Governor went, with some troops, to Nauvoo, for what real purpose no one has ever found out. He left the Carthage Grays (composed of the prophet's sworn

enemies) ostensibly to protect him. About five in the evening a quiet mob of some hundred men came to the jail, fired their guns to intimidate the guards, gained entrance and fired upon the prisoners. Hyrum was shot twice and fell dead; bullets poured into the room, Joseph responded with shots from his revolver, and then, as he sprang into the window, two bullets entered his body from behind, and one entered his breast from outside. He fell outward, into the hands of his enemies, exclaiming, "O Lord, my God!" Elder John Taylor, who was in the room, was wounded, but soon recovered, later to become President of the Church, and Elder Willard Richards, also present, escaped as by a miracle.

Thus ended the remarkable life of one of the most remarkable men of American history.

In reading over the prophet's letters and his diary one cannot but feel that here was a manly man, a very human man, in spite of the fact that he powerfully felt the divine commission upon him, one who must have impressed those about him with his love, his sympathy, his wisdom and understanding. On one occasion when the twelve apostles remonstrated with him for being harsh with them in one of his letters, and in believing evil of them upon insufficient and unreliable testimony, he replied:

"I have sometimes spoken too harshly from the impulse of the moment, and inasmuch as I have wounded your feelings, brethren, I ask your forgiveness, for I love you and will hold you up with all my heart, in all righteousness before the Lord, and before all men. . . . And I will now covenant with you before God, that I will not listen to or credit any derogatory report against any of you, nor condemn you upon any testimony beneath the heavens, short of that testimony which is infallible, until I can see you face to face, and know of a surety; and I do place unremitted confidence in your word, for I believe you to be men of truth. And I ask

JOHN TAYLOR, THIRD PRESIDENT OF THE MORMON CHURCH.

the same of you when I tell you anything, that you place equal confidence in my word, for I will not tell you I know anything that I do not know."

One remarkable fact is evident in all of the prophet's dealings with the members of the Church during his lifetime. He certainly held them to high standards, and when they were guilty of conduct unbecoming their professions a council was called and they were unhesitatingly cut off from fellowship. A score, a hundred, of such cases could be cited, where men of influence, of strong personality, of money, were cast out because of their sins and their impenitence. This was called "delivering them over to the buffetings of Satan." In some cases it resulted in repentance, and in others, in violent hostility to the prophet and his followers. Many of the fierce attacks made upon the church were the endeavors to "get even" of those who had been thus disciplined. There can be no question but it was this that ultimately led to Joseph's death.

Yet, he being dead yet speaketh. The work he began has never ceased. The helm of the church was soon firmly grasped by a master-hand, that of Brigham Young, and by him it was piloted, through equally stormy scenes, into the final haven of rest now enjoyed in Utah.

Who can explain Joseph Smith? What are "revelations from God"? What is their test? Is it not beyond all reason that a lad, born of poor parents, devoid of any save the commonest education, too poor to buy books, should have accomplished what he did in less than forty years, unless there were some great reason for it?

Let any one, even a literary genius, *after* forty years of life, try to write a companion volume to the *Book of Mormon,* and then almost daily for a number of years give out "revelations" by the score that internally harmonize one with another, at the same time formulate a system of doctrine for a new church, introduce many new

principles, resuscitate extinct priesthoods, and formulate a system of church government which has no superior on earth.

Would he succeed in making the system coherent? Could he influence scores of intelligent, wise, thoughtful, educated, religiously trained men, like John Taylor, Dr. Richards, and scores of others, besides attracting thousands to the fold of his church, as did Joseph Smith? Even if one were assured that the prophet was an impostor, that does not lessen the marvel. The mystery, the riddle, the problem, is even greater than before. Even if he be explained on the ground that he was a mystic gifted with superior psychic powers, the riddle still remains, the problem is still unsolved.

I offer no explanation.

That given by the Mormon Church is the full acceptation of Joseph's own claim for himself. Upon this acceptation the Church of the Latter-Day Saints is built. Without it the State of Utah, as it is today, with its wonderful history, its conflicts between saints and gentiles, its final peaceful blending into one reasonably coherent population, alike proud of the state and its history and achievements, could not have come into being.

Whatever one's personal opinion of Joseph Smith and his revelations may be, there is no concealing the wonderment that seizes one at the fact that this so-called ignorant youth, this self-educated man, martyred at thirty-nine years of age, had been able to formulate a "bible" of his own; had issued his *Word of Wisdom;* had received hundreds of "revelations" that even his severest critics and bitterest enemies cannot deny have a remarkable coherence; had attracted a number of well-educated, level-headed, keenly intelligent business men as well as ministers of the gospel, who yielded to his autocratic rule with a submissiveness little short of marvelous; and had gathered from all parts of the earth proselytes, who, whatever

other qualities they failed to possess, were so devoted to their prophet and leader as to be willing to follow him to the ends of the earth, through incredible hardships, and even joyously to martyrdom. To deny to such a man a wonderful power over the human heart and intellect is absurd. Only fanatical prejudice can ignore it. However he may be accounted for by the reasoning mind, Joseph Smith, the Mormon Prophet, was one of the wonders of his time. That he is not an enigma to his followers (as he certainly is to his critics) is only another proof of his wonderfulness.

CHAPTER IV

BRIGHAM YOUNG, RELIGIONIST AND STATESMAN

Joseph Smith was dead — murdered in Carthage jail. His flock was terrorized, — as sheep harried by wolves on every hand. Whither should they turn? Whence flee, they, who, hitherto, had relied upon their prophet for guidance? Had God forever deserted them? Were all their high hopes to come to naught? Were they to be destroyed, root and branch, as their enemies threatened, unless they would leave the country for good and all? To whom should they turn for help, consolation, direction? Who was now the leader of the church? What provision — if any — had Joseph made for his successor? His enemies were assured that at his death, the Church as an organization, would go to pieces, and this, doubtless, accounted for their determination to slay him.

But expectations of enemies and fears of timid believers alike were all wasted mental efforts. It may well be questioned whether any one of the Mormon leaders of the time, even the prophet himself, realized the strength, power, and undeniable mastership of one of their number, honored even though he had already become by the marked confidence of his leader. Unconsciously they were developing one of the most remarkable statesmen of his century.

It may well and naturally here be asked: What is it makes the statesman? What is it stamps a man as great?

If the seizing of the helm of a young church, still in the process of being founded amongst a population the

most hostile, and at the same time threatened with apostasy and false leadership from within, and piloting it with firm, strong and yet kindly hands to safety and strength; if the keeping together of a dispossessed and persecuted people, robbed of their homes and possessions, hunted as though they were wild beasts, and so encouraging them that they never lost faith in God or their newly-founded church and its leaders; if the ability to cheer these people while they waited, for weary months, in winter quarters, for the signal to start on one of the most fearful overland trips, and then leading the way for them and confidently awaiting their coming; if the gathering together of inchoate masses of humanity from half the countries of Europe, as well as of the eastern and middle-west states; the conducting and guiding them out into the heart of an unknown and trackless desert, inhabited only by the Indians, and at the time, belonging to a neighboring though hostile country; the training of them in the arts of agriculture, under the new conditions of irrigation; the encouraging of them to the establishment of beet-sugar factories, cotton, woolen and flouring mills, the planting out of alfalfa fields, of orchards of every kind of deciduous fruits; the leaving his impress upon the educational institutions of the state, so that a dozen or more of them bear his name; the equal dominating of the legal machinery of his state; the putting his shaping hand upon the ecclesiastical architecture of his city and causing to be erected two of the notable structures of the United States; the encouraging of the drama and music among his people so that they built their own theatres and conducted their own performances, trained their own youths and maidens in song until their choirs became world-famed, and the organ of their chief tabernacle was recognized — though home-constructed — as one of the most massive and effective organs in the world — I say, if the doing of these things constitute statesmanship and show greatness, power, genius in

a man, then Brigham Young, regardless of all that has been, or may be said against him, is unquestionably one of the great statesmen of American history.

I doubt whether any other man of equal prominence has had so much virulent hostility poured upon his head. Brigham Young has been denounced as impostor, tyrant, false-prophet, promulgator of the hated system of polygamy, responsible for the Mountain Meadow Massacre and the death of many "apostates" and open enemies of the Mormon faith, bold defier of the United States Government and its duly authorized officials, falsifier of his accounts, relentless in crushing, even to the death, all opposition to his will, an untrue friend, a consummate hypocrite, and a master in all the arts of conscious villainy. That he was a perfect man not even his best friends will contend, but the more one studies his life, weighs his acts, and balances his professions and deeds, the more is he convinced of his sincerity, from his standpoint, in his leadership of the Mormon Church. Indeed, his whole life may be taken as an exemplification of the following declaration made by him at a conference, held in Boston, Mass., in 1843:

"If this work—(that of the Mormon Church)—does not live, I do not want to live; for it is my life, my joy, my all; and if it sinks, God knows I do not want to swim."

When men who write books to denounce him are yet compelled to write of Brigham Young in the following strain, it is not unreasonable to suppose he was a man of unusual power. In 1913, Frank J. Cannon and George L. Knapp, with Revell as publisher, issued their *Brigham Young and His Mormon Empire*. In their introduction they say:

"In the middle decades of the nineteenth century, there arose in America a man destined to a career more strange and incredible than most romancers have dared to

BRIGHAM YOUNG, SECOND PRESIDENT OF THE MORMON CHURCH.

imagine for their heroes. That man was Brigham Young.

"Born on a soil saturated with New England Puritanism, he became a follower and then a leader of the Mohammedanism of the west. Born in a community which held that Heaven had withdrawn from man, and which admitted no revelation less than eighteen centuries old, he was accepted by half a million people as the mouth-piece and representative of God. Born of a race in which monogamy had been the accustomed form of marriage since before the dawn of history, he is famous today as having been husband of a score of wives, sire of a half-hundred offspring.

"Brigham Young was not one of those children of fortune who move with the current of the age, and draw greatness from the greatness of their country. Good fortune did not pass him by altogether, but neither did she embarrass him with favors. Brigham never came in contact with the real life of the nation, save to defy it, and flout it, and do his best to change it. He set up an Asiatic despotism on American soil. He maintained a Mohammedan marriage system in a Puritanical land. He built a theocracy in an age which already had witnessed the birth of Renan and Ingersoll. He took a broken and dispirited people, led them across a thousand miles of desert, and with them founded his kingdom in the fertile valley by an inland sea.

"The man who could achieve these things, even with some aid from fortune, was a man of no common calibre. Without a day of military training, he became a very efficient general-in-chief to his people. Without an hour's reading of law, he made himself judge and law-giver — and in the main a just one — for a whole community. Where his own knowledge was deficient, he had skill to use the ability of others; and to this day the finances, the government, the merchandising, the architecture, the social

life, and even the agriculture of the Mormon community, bear the stamp put upon them by Brigham Young.

"He matched his wits against the might of the United States government and did not come off second best. He yielded in outward seeming to federal power; but in reality he was Emperor of his little realm to the hour of his death, and his subjects never doubted his supremacy. He drove federal appointees in disgrace from his kingdom, and took their positions for himself and his favorites. No matter how overwhelming the power with which he was dealing, Brigham Young never was a suppliant. He stormed, bullied, lied, intrigued, finessed, cajoled; he never pleaded for mercy nor owned himself in need of mercy. He met chastisement with fresh provocation. Knowing polygamy to be the most offensive of his sins in the eyes of the nation, he lived openly with a score of wives, sent his most honored polygamous apostle to Congress as a territorial delegate, and permitted his subordinate priests to debate with Christian clergymen on the divinity of plural marriage.

"He has became a central figure of weird and distorted legends. He has been made the idol of a worshipping people. But never has he taken his place in calm, impartial history."

Few men have had more pages written about them and not a few of them have been in the highest degree, slanderous and abusive. I shall neither malign nor defend him. I wish simply to present his work as I see it, accepting his own professions at their face value and as carried out in his life.

It should never be forgotten that Brigham Young never claimed to be the originator of Mormonism, and so far as I can learn, only once did he claim Divine inspiration as a prophet. His "revelation" was given at the time of the exodus from Illinois, and is well worth quoting in full:

"The Word and Will of the Lord, given through

President Brigham Young, at the Winter Quarters of the Camp of Israel, Omaha Nation, West Bank of Missouri River near Council Bluffs, January 14th, 1847.

"1. The word and will of the Lord concerning the Camp of Israel in their journeyings to the West.

"2. Let all the people of the Church of Jesus Christ of Latter-day Saints, and those who journey with them, be organized into companies, with a covenant and promise to keep all the commandments and statutes of the Lord our God.

"3. Let the companies be organized with captains of hundreds, captains of fifties, and captains of tens, with a president and his two counselors at their head, under the direction of the Twelve Apostles.

"4. And this shall be our covenant, that we will walk in all the ordinances of the Lord.

"5. Let each company provide themselves with all the teams, wagons, provisions, clothing, and other necessaries for the journey that they can.

"6. When the companies are organized, let them go to with their might, to prepare for those who are to tarry.

"7. Let each company with their captains and presidents decide how many can go next spring; then choose out a sufficient number of able-bodied and expert men, to take teams, seeds, and farming utensils, to go as pioneers to prepare for putting in spring crops.

"8. Let each company bear an equal proportion, according to the dividend of their property, in taking the poor, the widows, the fatherless, and the families of those who have gone into the army, that the cries of the widow and the fatherless come not up into the ears of the Lord against this people.

"9. Let each company prepare houses, and fields for raising grain, for those who are to remain behind this season, and this is the will of the Lord concerning his people.

"10. Let every man use all his influence and property

to remove this people to the place where the Lord shall locate a Stake of Zion.

" 11. And if ye do this with a pure heart, in all faithfulness, ye shall be blessed; you shall be blessed in your flocks, and in your herds, and in your fields, and in your houses, and in your families.

" 12. Let my servants Ezra T. Benson and Erastus Snow organize a company.

" 13. And let my servants Orson Pratt and Wilford Woodruff organize a company.

" 14. Also, let my servants Amasa Lyman and George A. Smith organize a company.

" 15. And appoint presidents, and captains of hundreds, and of fifties, and of tens.

" 16. And let my servants that have been appointed go and teach this my will to the saints, that they may be ready to go to a land of peace.

" 17. Go thy way and do as I have told you, and fear not thine enemies; for they shall not have power to stop my work.

" 18. Zion shall be redeemed in mine own due time.

" 19. And if any man shall seek to build up himself, and seeketh not my counsel, he shall have no power, and his folly shall be made manifest.

" 20. Seek ye and keep ye all your pledges one with another, and covet not that which is thy brother's.

" 21. Keep yourselves from evil to take the name of the Lord in vain, for I am the Lord your God, even the God of your fathers, the God of Abraham and of Isaac, and of Jacob.

" 22. I am He who led the children of Israel out of the land of Egypt, and my arm is stretched out in the last days to save my people Israel.

" 23. Cease to contend one with another, cease to speak evil one of another.

"24. Cease drunkenness, and let your words tend to edifying one another.

"25. If thou borrowest of thy neighbor, thou shalt return that which thou hast borrowed; and if thou canst not repay, then go straightway and tell thy neighbor, lest he condemn thee.

"26. If thou shalt find that which thy neighbor has lost, thou shall make diligent search till thou shalt deliver it to him again.

"27. Thou shalt be diligent in preserving what thou hast, that thou mayest be a wise steward; for it is the free gift of the Lord thy God and thou art his steward.

"28. If thou art merry, praise the Lord with singing, with music, with dancing, and with a prayer of praise and thanksgiving.

"29. If thou art sorrowful, call on the Lord thy God with supplication that your souls may be joyful.

"30. Fear not thine enemies, for they are in mine hands, and I will do my pleasure with them.

"31. My people must be tried in all things, that they may be prepared to receive the glory that I have for them, even the glory of Zion, and he that will not bear chastisement is not worthy of my kingdom.

"32. Let him that is ignorant learn wisdom by humbling himself and calling upon the Lord his God, that his eyes may be opened that he may see, and his ears opened that he may hear.

"33. For my Spirit is sent forth into the world to enlighten the humble and contrite, and to the condemnation of the ungodly.

"34. Thy brethren have rejected you and your testimony, even the nation that has driven you out;

"35. And now cometh the day of their calamity, even the days of sorrow, like a woman that is taken in travail; and their sorrows shall be great, unless they speedily repent; yea, very speedily.

"36. For they killed the prophets, and them that were sent unto them, and they have shed innocent blood, which crieth from the ground against them.

"37. Therefore marvel not at these things, for ye are not pure, ye cannot yet bear my glory; but ye shall behold it if ye are faithful in keeping all my words that I have given you from the days of Adam to Abraham; from Abraham to Moses; from Moses to Jesus and his apostles; and from Jesus and his apostles to Joseph Smith, whom I did call upon by mine angels my ministering servants; and by mine own voice out of the heavens to bring forth my work,

"38. Which foundation he did lay, and was faithful and I took him to myself.

"39. Many have marveled because of his death, but it was needful that he should seal his testimony with his blood, that he might be honored, and the wicked might be condemned.

"40. Have I not delivered you from your enemies, only in that I have left a witness of my name?

"41. Now, therefore, hearken, O ye people of my church; and ye elders listen together, you have received my kingdom.

"42. Be diligent in keeping all my commandments, lest judgment come upon you, and your faith fail you, and your enemies triumph over you. So no more at present. Amen, and Amen."

Though Brigham did not publish more "revelations," he fully believed that Joseph Smith was divinely inspired, that the *Book of Mormon* was a new revelation of God's truth to his people, and that God as distinctly spoke to His children in this latter-day through Joseph Smith as in the past He had done through Moses, Elijah and the other prophets.

As one studies his life, viewed from every angle, there is not a single act that can be construed in any other way

than in the light of these beliefs. Having accepted Joseph Smith as the prophet of the living God he became his devout follower. In all the persecutions, through ill as well as good report, when homes and families were imperiled, when life itself was at stake, he never faltered, never wavered, never moved with an uncertain step. In loyalty and devotion, in steadfast adherence and willing obedience to his leader, history finds no superior in the devotion Brigham Young showed to Joseph Smith.

He was born at Whitingham, Windham County, Vermont, June 1, 1801. His parents were poor, and he was the ninth child in a family of eleven, hence his young days saw nothing but hard work and poverty. Yet there was good blood in his veins, and he developed a stout body and a healthy mind, growing up to know the gospel of hard work. He became carpenter, painter, glazier. When he was three years old his parents moved into New York State and there, after several "movings," he finally came in contact with the *Book of Mormon* and the teachings of Joseph Smith. When he was twenty-one he had married, and his wife bore him two children. She followed him into Mormonism, but died in 1832. As Brigham studied the *Book of Mormon* and the teachings of the new prophet he became convinced of Joseph Smith's sincerity, power, and divine commission, and on April 14, 1832, with his devoted friend and follower, Heber C. Kimball, was baptized into the Mormon Church by Eleazer Miller, at Mendon, New York. From this moment the fate of Mormonism was changed, though the Mormons would all contend that it was all arranged according to God's will.

Ere long Brigham went to Kirtland, Ohio, to meet the prophet. Arrived there, the new convert must have been wonderfully moved, for he "spake in tongues," which Joseph interpreted to be of the pure Adamic language. At that moment Joseph found his most sterling, loyal, accomplished and worthy follower. Joseph was to receive

the "revelations," Brigham to carry them out, for he was essentially a worker. As the writers before quoted have said:

"It was Brigham Young who brought care and method to the grandiose projects of the church leaders. It was Brigham who knew how to move by practical ways to a desired result. Smith had revelations that a temple should be built. Brigham went to work to build one. It is thus that the history of Mormonism came to be the biography of Brigham Young. Less brilliant and far less learned than many of the devotees of the new faith, he excelled them all in his capacity for ordered, practical work. Without Smith Mormonism could not have been founded. But without Brigham Young the work of all his predecessors and colleagues would have been scattered and brought to naught."

Thus write the scoffers. But the Mormons calmly contend that Brigham was as much an inspiration of God in his way as Joseph was in his.

As days went by Brigham proved his loyalty, devotion and trustworthiness. He was sent on a mission to Canada. Nothing since the time Christ sent out His Twelve was more remarkable than the way the prophet sent out his followers. What was the power that enabled Smith so to control these hard-headed men, and send them out, without purse or scrip, on an arduous, thankless, and apparently hopeless task? But Brigham and his co-workers went, *and succeeded.* Their home-coming was a triumph, and among men of power Brigham had demonstrated he was worthy a high place.

Next came the test of bravery and courage in the face of mob persecution. The faithful in Missouri were being mobbed. Who would go up to their help? "Zion's Camp" was organized, and while it accomplished nothing of what it went to do, it "tried men's souls," it was the furnace that tested the worth of men's professions. Brig-

General View of Salt Lake City

The Temple and Hotel Utah to the right; the snow-clad Wasatch Range in the distance

ham was one of the leaders in this movement and won the added approval of the prophet and his followers.

Out of the men thus tried Joseph now selected the twelve apostles, and Brigham was third in the order chosen. He and they were again sent on missions, and the new faith spread with remarkable rapidity.

Soon came the imprisonment of Joseph. This lasted for over six months, and as the president of the twelve apostles, the government of the church fell upon Brigham's shoulders. On Joseph's release there was no fault found with the temporary head's administration, and new responsibilities and work were thrust upon him, though he was content to work as a skilled laborer, whenever opportunity arose, at the completion of the temple at Kirtland.

In 1840, he was sent with others on a mission to England, and there proved his powers as an organizer. He was tireless in industry, established a publishing house for the wider dissemination of Mormon principles and teachings, and was one of a committee to select and publish a hymnbook, started the *Millenial Star,* a Mormon weekly paper, and was one of its editors. In addition, his essentially practical mind saw that some means must be adopted to enable the poorer of their converts to get to Zion, for one of the chief preachings of Mormonism at that time was that the saints must "gather together." This led to the organization of the Perpetual Emigration Fund of the Church, which later grew into a tremendous power for the upbuilding of the church.

Brigham's report of this great missionary trip shows the character of his mind. Here is a part of it:

"We landed as strangers in a strange land, and penniless, but through the mercy of God we have gained many friends, established churches in almost every noted city and town in Great Britain, baptized within 7,000 and 8,000 souls, printed 5,000 *Books of Mormon,* 3,000 hymn books, 2,500 volumes of the *Millennial Star* and

50,000 tracts, emigrated to Zion 1,000 souls, establishing a permanent shipping agency, which will be a great blessing to the saints, and have left sown in the hearts of many thousands the seeds of eternal truth which shall bring forth fruit to the honour and glory of God; and yet we have lacked nothing to eat, drink or wear; in all these things I acknowledge the hand of God."

On the 20th of April, 1841, he and five of his companions and a company of one hundred and thirty converts set sail for New York. They arrived at the rapidly growing Mormon center of Nauvoo on the first day of July. Soon after their arrival Joseph Smith received a revelation which, after commending Brigham for his faithfulness, informed him that he no more would be required to leave his family or go forth on missionary labors.

During the short interregnum of peace enjoyed by the Mormons in Nauvoo Brigham labored faithfully with the prophet for the upbuilding of the city and the church. An exceedingly liberal charter was granted by the legislature, the foundation of the new temple laid, the University started, and the "Nauvoo Legion of the City of Nauvoo" organized. But the gathering together of the Mormon converts from all over the country, and from Europe, was construed by the politicians and those who were jealous of Mormon power, into a desire of the prophet and his followers to rule in politics. The anti-Mormon party was formed, and as has been shown in the chapter on Joseph Smith, this was the beginning of the end of Mormon dominancy.

In all the trouble that ensued Brigham never once faltered, never once failed his leader. Joseph learned more and more to rely upon his friend and, with a seeming premonition of his own end, asserted that his people would yet suffer much affliction, would ultimately be driven out and compelled to seek a home in or beyond the Rocky

Mountains. Before this he had revealed a vision he had had, as follows:

"I saw Elder Brigham Young standing in a strange land, in the far south and west, in a desert place, upon a rock in the midst of about a dozen men of color, who appeared hostile. He was preaching to them in their own tongue, and the angel of God standing above his head, with a drawn sword in his hand, protecting him, but he did not see it."

When the culminating disaster fell upon the saints in the murder of their prophet and his brother, the innate power of leadership possessed by Brigham Young at once asserted itself. At the time, he was away on a mission, in New Hampshire, but speedily returned on learning the sad news. Before his arrival he doubtless had formulated the ideas which led to his being placed in the position of power. For, ere he arrived, Sidney Rigdon had hurriedly returned from Pennsylvania with the avowed object of being appointed the "guardian" of the church. Sidney was one of Joseph's counselors, and, therefore, one of the *First Presidency* of the church. Hence, he assumed that, naturally, Joseph's mantle would fall on him. Instead of waiting for the arrival of the twelve apostles to decide the matter, Rigdon sought to urge his claims upon the people. Brigham, however, had decided upon his course. He was convinced that, by the law of the church, its government had now fallen into the hands of the twelve apostles. Through the apostasy of his seniors in the quorum he became the first instead of the third of the apostles, and was made the presiding officer of the twelve who should decide in the contest that followed. The action was short and sharp. Bancroft thus writes of it in his *History of Utah,* p. 200:

"The truth is, Sidney was no match for Brigham. It was a battle of the lion and the lamb; only Brigham did not know before that he was a lion, while Sidney received

the truth with reluctance that he was indeed a lamb. Something more than oratory was necessary to win in this instance; and of that something with great joy in his heart Brigham found himself in possession. It was the combination of qualities which we find present primarily in all great men, in all leaders of men, intellectual force, mental superiority, united with personal magnetism and physique enough to give weight to will and opinion; for Brigham Young was assuredly a great man, if by greatness we mean one who is superior to others in strength and skill, moral, intellectual, or physical. The secret of this man's power, a power that within a few years made itself felt throughout the world, was this: he was a sincere man, or if an impostor, he was one who first imposed upon himself. He was not a hypocrite; knave, in the ordinary sense of the term he was not; though he has been a thousand times called both. If he was a bad man, he was still a great man, and the evil that he did was done with an honest purpose. He possessed great administrative ability; he was far-seeing, with a keen insight into human nature, and a thorough knowledge of the good and evil qualities of men, of their virtues and frailities. His superiority was native to him, and he was daily and hourly growing more powerful, developing a strength which surprised himself, and gaining constantly more and more confidence in himself, gaining constantly more and more the respect, fear, and obedience of those about him, until he was able to consign Sidney to the buffetings of Satan for a thousand years, while Brigham remained president and supreme ruler of the church."

The conflict was speedily over. Brigham called upon Rigdon to state his claims before a council of the priesthood, and later, before a public meeting of all the saints. After the latter had eloquently presented his case for an hour and a half Brigham arose, and, in a few sentences, completely demolished Rigdon's claims. From that time

on until the day of his death, no one questioned Brigham Young's leadership or denied his power.

Then came the exodus! And what a time that was to try men's souls. To keep the people together after they were driven across the Mississippi; to hearten them for their arduous pilgrimage; to gather the needful horses, oxen, wagons, supplies, clothing, provisions; to care for the destitute and sick, the unprotected, young, and incompetent aged. The first night out, spent on Sugar Creek, Iowa, "nine wives became mothers. Nine children were born in tents and wagons in that wintry camp. How these tender babes, these sick and delicate women were cared for under such conditions, is left to the imagination of the sensitive reader," says Whitney.

In due time the march began, Brigham ever in the lead, seeking out the best road, determining the best place for the night camp, ever watchful, ever exhorting, ever protecting even the beasts of the caravan from carelessness or ignorance.

The story is well known of the wearisome journey and their final arrival on the shores of the Great Salt Lake.

CHAPTER V

OUT OF GREAT TRIBULATION

In the chapter on the prophet, Joseph Smith, it will be seen that Mormonism was not cradled in security and rocked in sweet repose. From the time he declared his vision until his dastardly murder at the early age of thirty-eight years, the prophet's life was one long succession of irritating, fierce, bitter persecutions, in which his followers pretty generally shared.

There was no change in the spirit at his death, and though his enemies could no longer justify their hostility to the Church by claiming their hatred to the imposture of his leadership, they did not cease their persecutions. For several days after the murder excitement reigned supreme. The people of Nauvoo were afraid the mob would come and exterminate them, and the people of Carthage and Warsaw were afraid the Mormons would begin a war of retaliation. But these persecuted people were too stunned to do any other than weep over the grave of their prophet. Their leaders counseled wisely — they pleaded for, they demanded peace.

To the struggle of Sidney Rigdon to gain control of the church, the painful disturbances which followed, it is not necessary to make reference now, save that it only added to the great burden the Church was carrying. As soon, however, as matters of presidency were settled the saints set to work with renewed energy to complete their temple, and build up their city. Though the leaders had counseled peace there were some ardent and passionate

spirits among them, naturally, who could not submit to injustice or abuse because they were Mormons and they helped keep alive the flames of a steady, though partially "banked" persecution. Among the most pernicious of those actively urging on the mob spirit against the Mormons were those who had once been members of the church, but who, for some reason, had been cast out.

From January to October, 1845, the Mormons lived in constant turmoil. Troubles were never ceasing. Then a "fire and sword" party started to burn the ripened crops of the Mormons and their homes. For a week the sheriff was helpless and nearly two hundred buildings and much grain were destroyed. Many aged, young and sickly persons were rendered homeless, and startled, terrified, by the actions of the mob, exposed to night conditions, became sick, and died. The Mormons claim that while they were fleeing and dying, the mob, embracing doctors, lawyers, statesmen, professed Christians of various denominations, with the military from the colonels down, were busily engaged in filching or plundering, taking furniture, cattle and grain from their deserted homes and farms. Each probably justified his conduct in his own way, as all human beings usually do. Then the old Missouri cry was taken up with renewed energy and vigor: "Drive out the Mormons." It should not be overlooked that early in the year the legislature revoked the charter of the City of Nauvoo and also that of the Legion. On the 22nd of September a meeting of the citizens of Quincy, Illinois, took place. Its purpose was a revival of the old methods of Missouri — a demand for the entire removal of the Mormons from Illinois. A committee was appointed and met with one from the Mormons. The latter finally agreed to leave under conditions that, as one reads them now, can only be considered as most fair and equitable. On the first and second of October a meeting was held at Carthage (where the murder of the prophet had occurred). Nine of the

immediately neighboring counties were represented. The usual tirades against the Mormons were repeated, and the judge of the circuit court was requested not to hold court that fall, as it was certain disturbances would arise.

Certainly, the Mormons were determined to seek justice for the injuries done to them and their prophet and this was their enemies' method of seeking to prevent that justice from being done.

But the Mormons also desired to leave. They knew the temper of mobs by this time and longed to get to where they could worship and live in their own way unmolested, and they began to prepare for a speedy exodus in the early spring. On the sixth of June, 1845, Mormon-baiting began again, and it was soon evident that nothing but a complete exodus would satisfy the people. All Nauvoo, therefore, became active with preparations for departure. But how dispose of the possessions they could not take with them? Houses, lots, barns and farms, were not immediately convertible into money, or even exchangeable for horses and wagons, at a moment's notice. Was there any recognition of this fact on the part of the people of Illinois? Did they care? Were they thinking of property soon to be cheaply gained, or of the needs of the fleeing Mormons? There was little active Christianity in the answer given at the time. A few men were left behind to make the best bargains possible for their abandoned possessions, and the rest, almost at the point of the sword, gathered together, early in February, 1846, on the eastern bank of the Mississippi.

On the 4th, the first teams began to cross over in flat boats, and for days these boats shuttled back and forth, together with every kind of available craft conveying horses, wagons, mules, cattle, passengers and their personal possessions. It was winter time. The cold was intense. Snow began to fall, and soon the river was frozen over, so that after about the 17th the remainder of

"The Salt Lake Trail"

From a painting by J. Gardner Scott. Reproduced through the courtesy of the Union Pacific Railroad

the people crossed on the ice. Camp was established at Sugar Creek, a few miles from Nauvoo, but almost within sight of the city. When all the people were assembled, near the end of March, after receiving public and private instructions from Brigham Young as to their march, the journey to Council Bluffs, 400 miles away began.

Were they gloomy, bitter, full of hatred at their enemies, utterly cast down, hopeless as to the future? The men and women of Iowa watched them as they passed and wondered that a people who were practically outcasts from their civilization, and traveling whence they knew not, could be so happy and carefree. They watched them camp at night and engage in songs and prayers of praise and thanksgiving, and then make merry with dance and song.

As they journeyed their ranks were swelled with fresh bands, until their wagons numbered 3,000, and they had 30,000 head of cattle, a great number of mules and horses, and immense flocks of sheep. In due time the Missouri was reached, and Winter Quarters established, in Nebraska, on the west side of the river, a little above the modern Omaha, on the site of the present town of Florence. In early autumn 12,000 Mormons were assembled here, or rapidly approaching.

In the meantime the defiant few, who had remained behind, determined not to abandon their homes and farms without a strong effort to sell them, together with those who were purposely left to make what bargains they could with the people of Illinois for the Mormon property, were having exciting, thrilling and dangerous experiences. Their presence was denounced as a breaking of the agreement, and mob violence again rose against them. Then it was that Major Warren was sent by the Governor to protect this small remnant of the Mormons, and he endeavored to do his duty faithfully and honestly. In a letter sent by him to the *Quincy Whig,* he asserted the

good faith of the Mormons, and condemned the ruthless spirit of the mob. Among other things he stated:

"A man of near sixty years of age, living about seven miles from this place, was taken from his house a few nights since, stripped of his clothing, and his back cut to pieces with a whip, for no other reason than that he was a Mormon, and too old to make successful resistance. Conduct of this kind would disgrace a horde of savages."

Yet in spite of this assurance of their own militia officer, and led by a professed Christian minister, the mob continued its violence until, on the seventeenth day of September, the remnant of the Mormons crossed the Mississippi, and on the same day the Gentiles took possession of Nauvoo.

Let us look, however, at the Mormon band. There were 640 of them. Nearly all were prostrated by chills and fever. There, at the river bank, among the rushes and reeds, poorly protected, without the shelter of a roof or anything to keep off the force of the wind and rain, women were lying in the throes of childbirth, and, later on, the wails of newborn infants were heard. They had not good food enough to satisfy the cravings of the sick, nor clothing enough to cover their nakedness. And this is but a small part of what they had to endure for months, until wagons from Winter Quarters were sent to bring them in.

It was too late to begin the long, weary and dangerous journey across the plains, so the winter was spent here, on the Missouri, getting ready. At last the pioneer volunteer band, led by Brigham Young, as lieutenant-general, with eight members of the Mormon Chief Council, on April 14, 1847, started for the west. The company consisted of 143 persons, including three women, in seventy-three wagons drawn by horses and mules, and loaded with grain and farming implements, and with provisions which were deemed sufficient to last them for a return journey.

Of the arrival of this pioneer company on the shores of the Great Salt Lake I have already written.

On the 4th of July, 1847, 1,553 more Mormons, under the command of Parley P. Pratt, left Winter Quarters for the west, which in due time met Brigham Young returning to report. There was great rejoicing at the meeting, and greater still when Brigham reached Winter Quarters and told of the wonderful country God had given them. Immigration now proceeded more rapidly, until all those gathered at the Missouri had either gone forward to Deseret — as the Mormons called their new land — or had abjured the faith and departed elsewhere.

But it must not be thought that this ended the stream of new-comers to the land of their Zion. Missionaries were working throughout Europe, and converts by the thousands were desirous of reaching Zion. Expeditions were organized and party after party crossed the plains and were duly absorbed in Utah. The poorer emigrants were aided by a revolving fund provided by the Church, which was to be returned as soon as the one aided could afford to repay. But in 1856, there was such an increased number of the poorer class who desired to reach Utah, that a cheaper method of transferring them across the plains than by wagons must be devised. Then it was that Brigham had the "inspiration" of the hand-cart brigade. It would afford fascinating reading could one give in full detail the story of this episode in the history of Mormonism. Suffice to say that the first "batch," numbering about 1,300 left Liverpool in 1846, and reached Iowa City in safety. Here the hand-carts were built. There was some unnecessary delay in this work, and it was not over-well done, yet the first companies, starting early in the season, got through without mishap.

The second company, commanded by James G. Willie, was not in motion westward until the middle of July, and the third, under Captain Edward Martin, until the end of

that month. These late starts were disastrous, for the Willie Company, which numbered about 500, after four weeks' travel reaching the Missouri River, were there warned by an elder, named Savage, who had already made the trip to the Salt Lake, that it would not be possible to cross the mountains with a mixed company of aged people, women and little children, so late in the season, without much suffering, sickness and death. But the counsels of Savage were overruled and the company set forth from Florence on August 18. The chief drawback of the earlier part of the journey was the breaking down of the hand-carts, the axles and boxes both being of wood. They reached Laramie, about the 1st of September, and were disappointed in that provisions were not there for them as had been promised. After careful consideration it was discovered that, at the present rate of travel and consumption of flour, the latter would be exhausted while the travelers were still three hundred and fifty miles from their destination. Instead of remaining until further provisions were obtained they rashly decided to go on, having reduced the ration of flour from one pound to three-fourths of a pound per day. At Independence Rock they received a letter informing them that provisions would meet them at South Pass, but as their flour would be gone before they reached that point, they were compelled again to reduce their allowance. This, perhaps, could have been borne, but now the weather began to grow colder and colder, and the streams they had to ford were so icy, that many were severely chilled. Hardships increased, sickness became rife, many of the older people lost heart and succumbed, until soon, it was seldom that a camp ground was left without one or more burials. Worn down by hunger, hardship, fatigue, scarcity of clothing and bedding, even strong men succumbed, and to weakness and debility was added the scourge of dysentery. Thus the party traveled on in misery and sorrow day after day, and

the minds and bodies of many became so dulled that they faced the death of their nearest and dearest without a seeming pang.

But it was when the snow storm broke upon them, and they were surrounded by snow a foot and more deep that they were compelled to halt and make a permanent camp until help could be secured. The dysentery increased in virulence and several died from exhaustion. In the meantime Captain Willie and two companions had gone ahead, in spite of the storm, to hurry up the expected provisions. They were gone three days — days that to the poor, sick, cold and starving emigrants, were weeks in seeming duration, crowded with pain and sorrow. Then, on the evening of the third day, relief came to them. Several covered wagons were seen and shouts of delight and joy rent the air. Before long, and as speedily as it could be arranged, a full distribution, not only of food, but of clothing and bedding took place, and there was general rejoicing. But they were still far from their "desired haven." They resumed their journey, at first going but a very few miles. It grew colder and colder; many got their feet, fingers and ears badly frozen, and the severities of the weather so increased the number of deaths that several were buried each day. Another snow storm swept over and about them, and at last, one day, it was found that there were thirteen who had died, of all ages and both sexes, and their poor, frail bodies were frozen stiff. While these were being buried two others died, so fifteen were laid in their graves on that one day.

Finally Fort Bridger was reached, where wagons and horses were provided, so that all rode into Salt Lake City. But it was a sadly diminished company that arrived. When they left Iowa City they numbered five hundred. A few deserted while passing through Iowa. When they reached Florence the number was four hundred, of whom sixty-six died on the journey.

Martin's Company, which followed, arrived on November 30, 1856. They had numbered near six hundred on the start, and had lost one fourth by death.

There has been much bickering as to who was to blame for the hand-cart expeditions. Whoever it was, it cannot be questioned that the members who survived reached Utah "through great tribulations," and if their faith was still unimpaired then, indeed, could they triumph in their deliverance.

CHAPTER VI

BUILDING A STATE

It was through great tribulations that the saints came to their chosen home in the far-away West. Persecutions followed them until civilization was left behind. The wild aborigines they met with were kindness personified compared with the people they were fleeing from. Brigham Young, as we have seen, led the first party of pioneers, who, on foot, on horseback, in wagons pulled by horses, mules and oxen, daily saw themselves a little nearer their unknown goal. At that time the region now known as Utah was a part of the domain of Mexico, and there is no doubt but that Brigham desired to get entirely out of the boundaries of the United States. Fate, however, willed otherwise, for, as is well known, one of the fruits of the Mexican War, — at this time threatening the peace of the two countries, — was the transfer to the United States of that vast western territory which included Utah, New Mexico, Arizona, and California.

Whither were they going — this advance band? Did they know? Did anyone know? It is very doubtful. Somewhere in the region of the Pacific, beyond the prairies, deserts and mountains, far, far out of the reach of their persecutors — this was their desire and, possibly, the extent of their knowledge. What sublime faith either in their leaders or in the ever-watchful guidance of God! There had been no exodus like this for a thousand years.

We have seen the first band of pioneers arrive in the Salt Lake Valley, July 24, 1847, and have heard Brigham

Young's declaration: "This is the place!" Work began immediately. Every Mormon was a worker. Some went into the canyons to cut down trees, others prepared for building by making adobes, and activity was rife everywhere. By the end of August twenty-nine log houses were built, either with roofs or ready for the usual substitute of poles and dirt.

Then more of the people came and, though crops were good, January, 1848, saw food growing so scarce that it had to be rationed out. Beef was poor, as the oxen had not yet recovered from the hard driving they had endured in crossing the plains. Yet every Sunday saw these people assembled in some suitable place for worship. Clothing was scarce. Furniture was home-made, and many substitutes for coffee and tea were used. The houses were built so as to serve as fortresses against the Indians. Lots were apportioned, but none allowed for speculation. The outside farming land was surveyed into five, ten, forty and eighty acre tracts, and given to those who could and would use them.

The second winter a thousand more well-filled wagons arrived and the people had to be provided for. The weather was exceedingly cold; nearly all suffered, for food was scarce, many having to subsist on roots, thistles and even rawhides. The Church authorities distributed a little milk, meat and a small amount of breadstuff to prevent starvation, but the famine continued until harvest time, which, fortunately, in 1849, was a most bountiful one. Indeed, for six years thereafter none wanted for bread in Salt Lake Valley.

During all this time, while a City and County Government had been organized, the Church practically controlled everything, its officers distributing provisions, apportioning lots and acreage, ordering work done and methods to be followed. In all this the leading spirit was Brigham Young. He was here, there and everywhere,

OLD STATE HOUSE, FILLMORE.

working, exhorting, planning, guiding, directing, stimulating and encouraging. The Bowery — a temporary building of poles and boughs — was erected for services and all the gatherings of the people. The streets of the city had already been laid out. Orchards and gardens were planted in every direction and thriving fields of grain gladdened the eye.

Then came the gold-seekers on their way to California. Many were abundantly supplied with money and they were willing to pay well for whatever the saints had to sell. Others were weary and dispirited, their cattle worn out, wagons broken and themselves empty in pocket and suffering from the unexpected hardships and dangers of the trip. These were willing to sell tools, household furniture and spare clothing at low prices, or eager to exchange them for provisions and pack-animals.

Carrying companies were organized to ply between the Missouri River and California. Thus ready means of communication were afforded the Mormons in providing for the conveyance of the gold-seekers and their goods. More immigrants came and more and more small bands were sent out to establish colonies in suitable locations. Thus Centerville, Bountiful, Ogden, Lynne, Provo, Battle Creek, Lehi, Fillmore, Payson and the rest were started and the valleys occupied.

In time there were conflicts between the settlers and the Indians and then came an Indian War, in which, of course, the Indians were defeated and shown the folly of fighting against the white man, even though it were in defense of their own rights.

Early in 1849 the Territory of Deseret was organized, with Salt Lake City as its capital, and arrangements made for the election of the officers. In due time at the election, all the offices were filled, with Brigham Young as Governor. A delegate, Almon W. Babbitt, was sent to Congress, to present a memorial that Deseret be admitted

as a state, accorded all the rights and privileges hitherto given to other sovereign states, and its constitution ratified.

The first consideration given by Congress was both cool and adverse. Babbitt was refused a seat, and the State of Deseret refused recognition. But the fight for the extension, and the suppression, of slavery was going on in Congress, so on the 9th of September, 1850, Deseret was admitted to the Union as the Territory of Utah, shorn somewhat extensively of some of the proportions it had assumed, and it was expressly provided that, when it was admitted as a state, the question of slavery should be determined by its citizens.

Now began that connection, as a legal part of the United States, which soon became an irritation both to the Territory and the Federal Government. Polygamy had already been established, and when the first batch of federal officials, appointed by the President, appeared on the scene, one of them, Associate Justice Brocchus, asking permission to address a conference of the Mormon Church, took occasion to upbraid the leaders for their belief in polygamy, exhorted the women to protest against it, and generally irritated everyone within the hearing of his voice.

Brigham Young, as President of the Church and Governor of the territory, rebuked Brocchus in no measured terms and thus began the quarrel, which, fostered by selfish and irresponsible men, lasted for years, and ultimated in the sending of a federal army to punish the alleged insubordination of the people of Utah. This army was so harassed that it was defeated ere it reached its destination.

There can be no question that for several years the personal and ecclesiastical influence of Brigham Young gave him almost absolute power as Governor. That he used this dictatorial power, in the main, wisely and unselfishly, is generally conceded, though, naturally, many of his indi-

vidual actions were severely criticised by those who were affected by them as they thought adversely.

In January, 1854, Utah again sought admission as a state, again to be refused. This, and a variety of matters in which they claimed the Federal Government discriminated against them, made the Mormons more angry than before, and doubtless widened the breach that caused the so-called "Utah War."

This war is a subject which, for proper discussion, would require several chapters, hence can receive but the most inadequate and meager reference. The Mormons, still smarting from the wrongs inflicted upon them in Illinois and Missouri, had organized a militia, which included every able-bodied man in the state. Conflicts of authority between the federal officials and the Mormon leaders led to complaints being forwarded with monotonous regularity to Washington, so that it soon became a general belief throughout the country that the Mormons steadfastly refused obedience to Gentile (that is, federal) law and were continually in a state of rebellion to federal authority. Anyhow, this was the ostensible reason for the Republican party urging upon President Buchanan that he oust Brigham Young as the Governor of Utah, and send a military force, disguised under the name of *posse comitatus,* to sustain the authority of his successor. This, on the face of it, seemed to the Mormons to savor of the same kind of injustice they had suffered in Illinois, and it aroused in them a strong and determined spirit of resistance. Brigham Young vowed he was Governor and would remain Governor. When the Mormons learned that a large force, well provisioned and armed, was moving towards Utah, they naturally inferred it was to be used against them. And, when it is recalled they were just passing through the throes of a famine year, so that there were many Mormons who had not had a full meal for a year or more, and further, that they were compelled

to feed great multitudes of almost starving emigrants who had just come in with hand-carts, it can scarcely be expected that they would look forward to a military force overrunning them and consuming their food supplies with any degree of equanimity. In addition to this politicians succeeded in having a mail contract, which had been given to one of the Mormons, annulled, and this added fuel to the fire. Bancroft thus sums up the causes of this war:

"Thus, in part through the stubbornness of the Mormons, but in part also through the malice of a dissolute and iniquitous judge, the spite of a disappointed mail contractor, the wire-pulling of birds of prey at Washington, and possibly in accordance with the policy of the President, who, until the Confederate flag had been unfurled at Fort Sumter, retained in the valley of Great Salt Lake nearly all the available forces in the Union army and a store of munitions of war sufficient to furnish an arsenal, was brought about the Utah War."

As soon as the approach of this remarkable force was known Brigham Young boldly threw down the gauntlet, or, if one regards the actions of President Buchanan as of that effect, then Brigham accepted the gage. He met a special representative of the government, Captain Van Vliet, with the positive assurance that, while he and his people loved the constitution and laws of the United States, they were determined to suffer no longer at the hands of corrupt men sent out to administer those laws, but who, constantly, violated the constitution, and that, if any army approached, it would be met and fought, and, if it ultimately succeeded in reaching the Valley, it would find the country a charred and barren waste. The day after Van Vliet departed for Washington, Brigham Young declared martial law, forbade all armed forces to march into the territory under any pretence whatever, and also called upon the militia to report for service.

The instructions of the commanding officer of the

militia forcibly bring before the reader the spirit of the times, and also remind him of the warfare of the Boers against the British. Here are a few lines from a dispatch captured by the enemy:

"On ascertaining the locality or route of the troops, proceed at once to annoy them in every possible way. Use every exertion to stampede their animals and set fire to their trains. Burn the whole country before them and on their flanks. Keep them from sleeping by night surprises; blockade the road by felling trees or destroying the river fords where you can. Watch for opportunities to set fire to the grass on their windward, so as, if possible, to envelop their trains. Leave no grass before them that can be burned. Keep your men concealed as much as possible, and guard against surprise."

Absurd, preposterous, impossible, that a few in Utah should dare to oppose the dignity of the military force of the United States! Of course it was! Yet, somehow, those few succeeded in utterly confounding — even if they did not utterly defeat in battle, — that same well-equipped, well-officered army. Its supply trains were burned, after being pillaged, the horses and cattle stampeded, the natural forage all destroyed, the soldiers kept awake and on edge by constant surprise attacks. Snow began to fall heavily, yet the trees that might have kept them warm had been destroyed. When they reached Fort Bridger, after a march of incredible hardship, they found the place burned to the ground and not a blade of grass left for miles. It was a time, that whole winter, of privation and suffering, for little relief was able to reach them.

When the country at large learned of the Mormon war and details began to multiply, they fiercely assailed the President for his actions. Fortunately wiser counsels now began to prevail on both sides, and it is believed, largely through the kindly and sane ministrations of Colonel

Thomas L. Kane, hostilities ceased, the President signed an amnesty proclamation, a conference of peace was held, the new Governor was accepted, and the soldiers marched without obstruction into Salt Lake City.

Yet, as they entered, what an object lesson was theirs. The artillery, trucks and baggage wagons rumbled over the stones and the sharp click of the horses' hoofs was heard. Nearby the creek murmured and splashed in its wonted manner. But there was no other sound. Zion was deserted. The Mormons had long before left the city, taking with them all their movable effects merely leaving a score of men behind, with instructions to apply the torch if the army came in hostile array against the city.

This desertion and Moscow-like precaution, however, were now unnecessary, and, in due time, the people returned to their homes.

Buchanan's impolitic and altogether reprehensible demonstration of force was possibly the moving impulse to that horrible carnival of murder and plunder known as the Mountain Meadow Massacre. The facts of this awful affair are generally well known. In 1857 a party of one hundred and thirty-six Arkansas and Missouri emigrants were passing through Utah on their way to California. They had trouble all the way from Salt Lake City as they passed southward to Cedar City. Crimination and recrimination was heard daily between themselves and the Mormons. Threatened with an unlawful military force — as they regarded it — by the President of the United States, the Mormons were not disposed to look with equanimity upon the passing of people who taunted them, sneered at their religion and, so it is claimed, openly boasted that they had had a hand in the killing of one of the leading Mormon preachers. Anyhow, thirty miles below Cedar City, the travelers were set upon by Indians, and, as it was afterwards claimed, Mormons in the garb of Indians, and

the whole party, except the children, were ruthlessly murdered.

Who committed the awful crime? The enemies of the Mormons and their leaders have always charged that Brigham Young was responsible for it. After a thorough and careful investigation of the matter I cannot find any evidence to this effect. While it does seem strange that no serious effort was made to arrest the supposed culprits until after outsiders began to cry for justice, there was no disposition shown either to obstruct justice or to prevent the bringing of the guilty wretches to the bar and allowing them to suffer the fullest penalty. Unfortunately, all but one of the chief perpetrators had fled the country, and their whereabouts to this day has never been clearly revealed. The one participant who was caught — John D. Lee — was tried, found guilty, and finally, on March 23, 1877, shot on the very spot where, twenty years before, the horrible deed had been perpetrated.

But, before Lee was brought to justice, during that delay of twenty years a host of trenchant and virulent pens were charging that Brigham Young was the real author of the massacre, and that it was a deed on a par with the disloyalty, etc., of the Mormon Church. These charges had their effect in inflaming the popular mind against the Mormons, and their persistence in the practice of polygamy but added further fuel to the flames.

During these years, however, the territory was growing in numbers and industries In 1862 there was a population of 65,000. The death-rate was an exceedingly small one. There was little pauperism or crime, and prosperity seemed to smile upon every community. The value of the real and personal property was reported in 1860 at $5,596,118, of improved farm lands at $1,333,355, of farming implements $242,889, of livestock, $1,516,707, and of manufactures, $900,153. It is well understood

that these figures do not represent more than, say, fifty per cent. of the actual value.

How wonderfully the country had changed in less than a decade and a half. Irrigation had made the desert valleys "blossom as the rose;" thriving settlements were to be found north, south, east and west; cattle, horses and sheep thrived on a thousand farms; sorghum and other factories were at work; beet-sugar experimentation and various manufactures were in progress, and the beehive emblem of the territory was well illustrated in the life of the people. While, however, in Salt Lake City, social life was made agreeable by concerts, the theater, occasional balls and the like, there was much less of these socializing influences in the more rural communities — naturally to their detriment.

In 1861 a great slice was cut from Utah and made into the State of Nevada, the eastern limit of the new state being extended in 1866 to the thirty-seventh meridian.

In 1862 another effort was made, without avail, to enter the Union as a state. Instead, Congress passed an act, introduced by Justine S. Morrill, of Vermont, for the purpose of punishing and preventing polygamy. This act was regarded by the Mormons as unconstitutional and they disregarded its prohibitions until, as recorded in the chapter on polygamy, the United States Supreme Court passed upon the subject and declared polygamy in the boundaries of the United States illegal. Until this decision was rendered, however, the subject was one of continual irritation and discussion. This irritation was materially increased by the injudicious antagonism of the Governor and the federal judges, and things came to such a pass that in May, 1862, Colonel P. E. Connor was ordered to Utah with about seven hundred men. In October the men reached Camp Floyd, or, as it is now termed, Fort Crittenden. They marched through Salt Lake City with fixed bayonets, loaded rifles, and shotted

cannon, but they were treated with what might be termed a contemptuous respect. These volunteers remained for some time, but each side exercised a wise restraint and their services were not required. New governors and officials came who were liberal, tolerant and conservative, and when Lincoln was inaugurated for the second time, all Utah joined to make the occasion one of great rejoicing, and when the news of his death reached Utah there was no state in the Union where there was more deep and genuine sorrow manifested than here.

Soon Colonel (now General) Connor was promoted to a new station and orders were received to disband the volunteers, but some of them were detained until replaced by regular troops. The reason for this was, doubtless, the fact that there was still considerable dissatisfaction against the Mormons, and this was shown by the murder of two Gentiles, Newton Brassfield and King Robinson. Innocent or guilty, the leaders of the Church were accused of at least conniving, if not actually ordering these assassinations. These and other crimes so alarmed the Gentiles, that, had the Overland railroad not been begun and completed about this time, there is little question but that the Mormons would have been left in entire possession of the country. But the railroad seemed materially to change things. There was an influx of fresh blood, and while there was still antagonism between the two factions, especially in Salt Lake City, there were several important defections from the Church and a spirit of greater tolerance began to appear.

In the commercial world, however, Gentiles and Mormons strove for control. The Z. C. M. I. (Zion's Cooperative Mercantile Institution) was organized, undoubtedly with the purpose of seeking to control the Mormon trade, and for a time it seemed as if ruin would fall upon the Gentile merchants. The latter, with the assistance of those Mormons who sought the reform of their

Church, but who had been cast out, established a newspaper — the *Salt Lake Tribune* — which openly waged war on Brigham Young and all his exclusive policies. And it may as well be stated here that this paper continued this policy as the organ of those who were "against the Mormons" until within the last decade or so, when there has been a more conciliatory spirit shown on both sides and each has been willing to work *with* instead of *against,* the other for the upbuilding of the city and state.

When Grant became President there is little doubt but that he would have suppressed polygamy even at the cost of a new war, had he not been shown that the Mormons were better able to solve their problems alone. For several years there were clashes about the control of the militia, which finally was disbanded, and the perennial fight on polygamy, which was not settled until the decision of the United States Supreme Court, and the issuance of the Woodruff Manifesto (see chapter on polygamy).

On the 29th of August, 1877, Brigham Young passed away, and with him, the ruling dominant spirit of Mormonism. His will from the time he took the helm had been more powerful than law in the hearts of his followers. His life-work was done. Loved, revered, obeyed by his people almost without exception, feared by all, yet respected by many of his enemies, his acts were now left for the judgment of time to pass upon. The state for which he laid the foundations, and upon which he built, is now a great commonwealth, one of the powers of the world of the West.

CHAPTER VII

POLYGAMY IN UTAH

Up to the year 1852 whatever antagonism had been aroused against the Mormons it cannot be said that polygamy had anything to do with it. Indeed the *Book of Mormon,* published in 1830, was as orthodox and conventional in its utterances on the marital relation and the punishments of God to man that should be visited upon their violators as were the sacred books and creeds of any of the Christian churches. For instance, one reads in the Book of Jacob, Chapt 2., Verses 22 to 28:

"And were it not that I must speak unto you concerning a grosser crime, my heart would rejoice exceedingly because of you. But the word of God burthens me because of your grosser crimes.

"For behold, thus saith the Lord, this people begin to wax in iniquity; they understand not the scriptures; for they seek to excuse themselves in committing whoredoms, because of the things which were written concerning David and Solomon his son. Behold, David and Solomon truly had many wives and concubines, which thing was abominable before me, saith the Lord. Wherefore, thus saith the Lord, I have led this people forth out of the land of Jerusalem, by the power of mine arm, that I might raise up unto me a righteous branch from the fruit of the loins of Joseph. Wherefore, I, the Lord God, will not suffer that this people shall do like unto them of old.

"Wherefore, my brethren, hear me, and hearken to the word of the Lord: For there shall not any man

among you have save it be one wife; and concubines he shall have none:

"For I, the Lord God, delight in the chastity of women."

How then, came this ancient, this oriental, this Old Testament, this Mahommedan doctrine of polygamy to be promulgated — added to the other weighty doctrines the Mormon Church had placed upon its shoulders? History is perfectly clear about it.

The prophet Joseph Smith had been dead eight years. The exodus from Nauvoo had taken place. The saints had established their new home in Salt Lake City. There had been, and were, rumors secretly passed about among the leaders that Joseph had believed, and some said, had lived, the doctrine of polygamy, yet few were prepared for the open promulgation of the doctrine, until on the 29th day of August, 1852, Brigham Young announced in the Tabernacle that a "Revelation on Plural Marriage" had been made to the prophet, Joseph Smith, at Nauvoo, and there written by him, July 12, 1843. The revelation was then read by Thomas Bullock, one of the elders of the Church. It was a document that would occupy some eight or nine pages of this work, and as it does not all specifically deal with the subject, need not be reproduced *in toto.*

The distinctive features of the revelation were as follows:

1. That all covenants not entered into and *sealed by the priesthood* (of Mormonism, of course) for *Eternity* as well as for time ended at death. Therefore a marriage to be *forever* must be one for time *and* eternity and be sealed by the priesthood. But if so performed and sealed it shall exist from everlasting to everlasting.

2. When Abraham was *commanded* and Sarah gave Hagar to him to wife, she violated no law for she, and Abraham also, acted under the command of God. Neither

did Isaac, Jacob, Moses, David nor Solomon sin in receiving many wives and concubines.

3. Section 132 reads, in part, as follows:

"Verily I say unto you, if a man receiveth a wife in the new and everlasting covenant, and if she be with another man, and I have not appointed unto her by the holy anointing, she hath committed adultery, and shall be destroyed. If she be not in the new and everlasting covenant, and she be with another man, she has committed adultery; and if her husband be with another woman, and he was under a vow, he hath broken his vow, and hath committed adultery, and if she hath not committed adultery, but is innocent, and hath not broken her vow, and she knoweth it, and I reveal it unto you, my servant Joseph, then shall you have power, by the power of my Holy Priesthood, to take her, and give her unto him that hath not committed adultery, but hath been faithful, for he shall be made ruler over many; for I have conferred upon you the keys and power of the Priesthood, wherein I restore all things, and make known unto you all things in due time."

4. Verse 59 of the same section affirms that if a man is called of God to the Priesthood and he is endowed with the keys of the power pertaining thereto "if he do anything in my name, and according to my law, and by my word, he will not commit sin, and I will justify him."

5. Verses 61 to 63 follow:

"And again, as pertaining to the law of the Priesthood: If any man espouse a virgin, and desire to espouse another, and the first give her consent; and if he espouse the second, and they are virgins, and have vowed to no other man, then is he justified; he cannot commit adultery; for they are given unto him; for he cannot commit adultery with that that belongeth unto him and to no one else; and if he have ten virgins given unto him by this law, he cannot commit adultery, for they belong to him, and they are given unto him, therefore is he justified.

But if one or either of the ten virgins, after she is espoused, shall be with another man, she has committed adultery, and shall be destroyed; for they are given unto him to multiply and replenish the earth, according to my commandment, and to fulfil the promise which was given by my Father before the foundation of the world and for their exaltation in the eternal worlds, that they may bear the souls of men; for herein is the work of my Father continued, that He may be glorified."

Naturally this alleged revelation will be received by the reader according to his preconceived ideas.

When Joseph Smith received this "revelation" it is not for me to say, any more than whence came all the other revelations. But it is of the utmost importance that we realize the effect it had upon his people. Brigham Young and all the leaders of the church accepted and lived it and urged it upon the attention and obedience of the flock.

To say that it made a sensation would be to put it mildly, not only in the Tabernacle at the time, but immediately throughout Utah and the United States. In England it threatened to break up, for the time being, the successful missions which had long been carried on. And it may as well be said that from that moment polygamy, as a religious doctrine, openly confessed and openly lived, was doomed in this "land of the free."

Undoubtedly, it was to this peculiar doctrine and institution, thus openly proclaimed and lived in Utah, that we owe much of the literature — some of it of a high class — written by cultured foreigners like Remy and Bienckley of France and Robert Burton of England, condemning the system but without vindictive vituperation such as was common to most political and religious enemies of the new faith.

So long as Brigham Young lived he stood by the revelation of the Prophet Joseph, though none knew so well as

LORENZO SNOW, FIFTH PRESIDENT OF THE MORMON CHURCH.

he the fierce hostility that faithfulness aroused. Yet, perhaps, he felt with the "Great Emancipator"— Abraham Lincoln, — who, after he had stricken the shackles from the negro slaves, was asked to repeat the blow and destroy polygamy in Utah, replied "Let it alone." Possibly Brigham Young was willing to allow time to adjust the matter. If it were found to be as dire an injury to the republic as its enemies feared and claimed there was little doubt but that the country at large would suppress it. But this is a mere supposition on my part. Brigham Young firmly adhered to the principle so long as he lived; never failed, when the need or occasion arose, to present his many wives to "the stranger within his gates," and, later, suffered arrest for his fidelity to the faith he professed.

In dealing with this subject it must be remembered that Christianity, outside of Mormonism, is essentially monogamous, and that all professedly Christian nations have, outwardly at least, vigorously defended monogamy as the only marital system that is natural or countenanced by God. This attitude was so thoroughly taken for granted that the contrary arguments of the polygamists aroused the fiercest antagonism. And it must also be remembered that the Mormon promulgation of the doctrine came at a time when the whole country was angered with the Mormons, and this seemed like a deliberate throwing of new and dangerous oil upon the flames.

Yet, now that it is no longer taught and practiced by the Mormons, it seems fair to allow high-minded and responsible Mormons themselves to be the expounders of their own reasons for accepting and entering into the polygamous relation.

For instance, Lorenzo Snow was one of the first of the elders sent as a missionary to England. He was wonderfully successful there. On his return, or soon thereafter, the prophet Joseph had a talk with him upon the

question of marriage — and plural marriage at that. According to Eliza R. Snow, his sister, a woman of great ability, of poetic gifts and dignified Christian character, her brother had been so occupied with his missionary labors that "virtually he had ignored the first commandment to 'multiply and replenish the earth.'" He was now thirty-one years of age. Joseph showed him his duty, and, at a family reunion on the 7th, 8th and 9th of May, 1884, when he had attained his seventieth birthday, and his wives and children, sisters and brothers, sons-in-law and daughters-in-law with their little ones, were assembled, he referred to this conversation with the prophet and its effect, as follows:

"About forty years ago I was an unmarried man, and to this day would have remained so, had I not received an understanding of the law of celestial marriage, its object and necessity in securing eternal glory and exaltation. My heart and soul, all my energies and ambitions were enlisted in the service of God, and I thought I could not better please or serve Him than by employing my entire time, unburdened by family cares, in the great field of missionary labor. Joseph, the Prophet, in a private interview at Nauvoo, on the banks of the Mississippi, gave me a full explanation of the principles of celestial marriage, and pointed out to me clearly my duty and privileges in reference to that law. This numerous, intelligent and honorable family assemblage is the result of my conformity to the knowledge, advice and counsel received in that important interview.

"Peculiar feelings and reflections are naturally aroused in contemplating the past and the singular circumstances in the providence of God, which have brought about this wonderful change in my present condition and prospects. Forty years ago, a lone bachelor of some thirty years, under the influence of erroneous views in the subject and necessity of marriage, its eternal blessings and crowning

glory; no loving wife to say, 'Dear husband;' no child to lisp the endearing words, 'My papa,' and now surrounded by and in the midst of wives, a host of children and grandchildren. What a grand and glorious transition. My heart is filled to overflowing with warmest feelings of gratitude to my heavenly Father for these marvelous blessings. And let me say, my dear children, that your father's obedience to this sacred law of celestial marriage, at that day, was attended with embarrassments and dangers of no ordinary magnitude. We were surrounded by our enemies, and in our midst were many half-hearted, ignorant saints, and some of the most wicked apostates, seeking to betray us into the hands of our bitter foes. When I look upon this extensive family, intelligent and gifted sons and daughters, half a score or more of the former having been called, sent forth and performed many years of arduous missionary labor among far off nations, and upon distant islands; and also behold many of my daughters honored wives and mothers in Israel, surrounded by healthy and happy children, and feel that all this is through the mercy and kindness of God, and the work of the Great Jehovah, what shall I say? Language is powerless to express the deep feelings of my heart for this holy and sacred opportunity on this, the celebration of my seventieth birthday, of standing here and beholding this glorious and heavenly inspiring spectacle.

"But it was not Lorenzo, it was not his wisdom, that wrought this marvelous change, but the Lord our God. You, my children, should keep in lively remembrance that you are the fruits of my obedience to the law of plural marriage, that it is your duty to honor and magnify this law as you may have opportunity. I trust your mothers will employ no influence on the minds of their children to cause feelings to grow up in their hearts against these principles.

"Allow me here to express my gratification in the con-

sideration that most of you, my dear family, observe the Word of Wisdom, and no one is in the habit of using wine or strong drink, nor guilty of the filthy practice of using tobacco, and that you are accredited with the reputation of living moral, upright and honorable lives; and I trust it may always be truthfully said that you sustain this reputation. Remember, children, to honor and obey your parents, that you may be entitled to the promise 'That your days may be long in the land.' Treat your father's wives kindly and respectfully. God has called them to be associated with him through time and eternity to assist in his duties and responsibilities and share his glory and dominion."

This is but one of scores of such testimonies that may be found in the "Lives," or "Autobiographies" of leading saints, and no one can truthfully say he has examined the question from the Mormon standpoint unless he has honestly considered these testimonies.

Let one other writer, not a Mormon by any means, and whose book has several times been quoted in these pages, — Fitz Hugh Ludlow, — give his experience with Mrs. Heber C. Kimball and the two polygamous wives of her son:

"I found myself in a sunny low-ceiled sitting room, where a fine-looking matron, somewhere in her well preserved fifties, sat talking to a pair of very tidy and prepossessing young women, both under twenty-five, and each holding a healthy baby. . . .

"The sight of them, after six hundred miles of stage-coaching, exhilarated me. 'Those are very pretty babies!' said I, addressing the matron in all sincerity of heart.

"'Yes, I think so,' she replied; 'but you must allow for a grandmother's partiality.'

"I replied that no such allowance was necessary to me

and continued, 'These young ladies are your daughters, then?'

"'They are my daughters-in-law, sir,' returned the fine-looking matron.

"'So you have both your sons and their wives with you? Indeed, you are to be envied, with such a delightful home about you in other respects.'

"'These babies, sir,' answered the matron gravely, 'are the children of my *son,* now abroad on the Lord's business — my *son,* Mr. Kimball, after whom this place is called. These young ladies are his wives, and I am the first wife of one you have often ere this heard of in the States, — Heber C. Kimball, second president, and next to our prophet Brigham Young in the government of Utah.'

"Why should I blush? Nobody else did. The babies crowed as they were tossed ceiling-ward in the maternal fashion, not even paying the Gentile intruder the compliment of getting scared by him. The young mothers had heard the whole conversation; yet Eve before the fall could not have been more innocent of shame. Mrs. Heber Kimball showed no sign of knowing that I could be surprised by anything she told me. Yet I, a cosmopolitan, a man of the world, liberal to other people's habits and opinions to a degree which had often subjected me to censure among strictarians in the eastern states, blushed to my very temples. . . .

"If the three observed my confusion, they had sufficient tact not to show it. I think that Mrs. Heber Kimball the first must undoubtedly have understood my position, and that the plain, straight-forward statement which she made was for the purpose of landing me at one throw in the midst of polygamous ideas. . . . Without the least braggadocio or offensive protrusion of our mutual and radical differences, she nevertheless set me at once upon the true basis, and let me know that polygamy was the law of the land where I now trod, and she and her

own as firm in the faith as I in monogamy, without anything more to be ashamed of in her creed than the Vicar of Wakefield or Horace Greeley in theirs."

Few religionists have written so honestly and candidly about polygamy as has Bishop Tuttle of the Episcopal Church, who spent seventeen years in Utah. He says:

"I pause to remark that if some strength accrues to Mormonism from its adjustment to the nature of man, some unsuspected strength is also won to it by its appeal to the nature of women. The self-sacrifice in women, the appeal is made to that. One knows not much of human life if he is ignorant that one of the dominating characteristics of women is the power of self-sacrifice. If self-sacrifice in women is continually in evidence in mothers, in wives of worthless husbands, in sisters in religious communities, and in women giving up all in devotion to love or duty or religion, who wonders that the appeal to it, as in the matter of polygamy, strange as it seems, must be accounted an element of strength in Mormonism. As a matter of fact, *there were no more strenuous and determined upholders of polygamy than most of the Mormon women who were personally sufferers by it.* To their nature it was a calamity and hateful. To their spirit it was religious duty and a call to self-sacrifice. Therefore they were loyal to it, determined to live in it, and if need be, to die for it. Spirit, roused and active, evermore predominates over nature."

Later on Bishop Tuttle writes:

"Polygamy is not a corner-stone of Mormonism, or even one of its necessary doctrines. That it is a doctrine of the Church and a divine ordinance is, I dare say, still taught by men and women among the 'saints,' but the practice, save in sporadic and sly cases, is given up in deference to the government and in obedience to the laws, and I may add, in compliance with the demands of the nature of the young women, and the will of the young men.

"Polygamy in Utah was lifted to the plane of religious duty, consequently it did not work the awful corruption in society one would have expected. That women's lives were clouded and their hearts imbittered by it is true, but not seldom the glory of the sacrifice hallowed the agony of suffering. It is God's will; it is the Church's law; it is my duty; were the injunctions women repeated to themselves, while they bore their sorrow and were silent."

It is needless to recount the various attacks made on polygamy by the churches of the country and in Congress. Yet never let it be forgotten that there was no state or federal law prohibiting polygamy in Utah, until 1862, hence the polygamous Mormons were breaking no such law up to that time. Neither, according to their interpretation of the Bible, were they breaking any divine law. When federal laws were passed against it many prominent men went to the penitentiary for their faith and practice. Of course it goes without saying that polygamy was the chief deterrent in Congress to Utah being admitted as a state, and yet the Mormons definitely refused to give up the practice. Their own contention is — and it is mainly borne out by the facts — that the United States Supreme Court had not yet passed upon the constitutionality of the act prohibiting polygamy, and that until it had,— as with them it was a matter of religious principle,— they had a perfect right to continue in its practice. But, when the highest court in the land decreed that the law was constitutional and must be enforced, Wilford Woodruff, then the president of the Mormon Church, issued the following manifesto, which was later accepted by the Church:

"OFFICIAL DECLARATION"

"To Whom it May Concern:

"Press dispatches having been sent for political purposes, from Salt Lake City, which have been widely

published, to the effect that the Utah Commission, in their recent report to the Secretary of the Interior, allege that plural marriages are still being solemnized and that forty or more such marriages have been contracted in Utah since last June or during the past year; also that in public discourses the leaders of the Church have taught, encouraged and urged the continuance of the practice of polygamy;

"I, therefore, as President of the Church of Jesus Christ of Latter-day Saints, do hereby, in the most solemn manner, declare that these charges are false. We are not teaching polygamy, or plural marriage, nor permitting any person to enter into its practice, and I deny that either forty or any other number of plural marriages have during that period been solemnized in our temples or in any other place in the Territory.

"One case has been reported, in which the parties alleged that the marriage was performed in the Endowment House, in Salt Lake City, in the spring of 1889, but I have not been able to learn who performed the ceremony; whatever was done in this matter was without my knowledge. In consequence of this alleged occurrence the Endowment House was, by my instructions, taken down without delay.

"Inasmuch as laws have been enacted by Congress forbidding plural marriages, which laws have been pronounced constitutional by the court of last resort, I hereby declare my intention to submit to those laws, and to use my influence with the members of the Church over which I preside to have them do likewise.

"There is nothing in my teachings to the Church or in those of my associates, during the time specified, which can be reasonably construed to inculcate or encourage polygamy, and when any elder of the Church has used language which appeared to convey any such teaching, he has been promptly reproved. And I now publicly declare

WILFORD WOODRUFF, FOURTH PRESIDENT OF THE MORMON CHURCH.

that my advice to the Latter-day Saints is to refrain from contracting any marriage forbidden by the law of the land.

"WILFORD WOODRUFF,
"President of the Church of Jesus Christ
of Latter-day Saints."

At the meeting when this was accepted by the Church, among other things, President Woodruff said:

"I want to say to all Israel that the step which I have taken in issuing this manifesto has not been done without earnest prayer before the Lord. I am about to go into the spirit world, like other men of my age. I expect to meet the face of my Heavenly Father — the Father of my spirit; I expect to meet the face of Joseph Smith, of Brigham Young, of John Taylor, and of the Apostles, and for me to have taken a stand in anything which is not pleasing in the sight of God, or before the heavens, I would rather have gone out and been shot. My life is no better than other men's. I am not ignorant of the feelings that have been engendered through the course I have pursued. But I have done my duty, and the nation of which we form a part must be responsible for that which has been done in relation to this principle."

Bishop Tuttle places the cold facts about polygamy in terse form, as follows:

"From 1830 to 1852 the Mormon Church did not promulgate it as a divine precept; from 1852 to 1862 it enjoined its practice as a divine right and duty, in defiance of Christian custom, *but not in disobedience to statute law;* from 1862 to 1890 it enjoined and continued the practice in defiance of statute law; and from 1890 onwards, while doubtless still believing polygamy to be a divine precept, it has forbidden the faithful to practice it because the practice would be in violation of the law of the land."

The Mormon attitude to the law is thus clearly expressed in *The Articles of Faith,* by Dr. James E.

Talmage, one of the Twelve Apostles, in dealing with the subject of "Secular Authority":

"An illustration of such suspension of Divine law is found in the action of the Church regarding the matter of plural or polygamous marriage. The practice referred to was estalished as a result of direct revelation, and many of those who followed the same felt that they were divinely commanded so to do. For ten years after polygamy had been introduced into Utah as a church observance no law was enacted in opposition to the practice. Beginning with 1862, however, federal statutes were framed declaring the practice unlawful and providing penalties therefor. The Church claimed that these enactments were unconstitutional, and therefore void, inasmuch as they violated the provision in the national constitution which denies the government power to make laws respecting any establishment of religion, or prohibiting the free exercise thereof. Many appeals were taken to the national court of final resort, and at last a decision was rendered sustaining the anti-polygamy laws as constitutional and therefore binding. The Church, through its chief officer, thereupon discontinued the practice of plural marriages, and announced its action to the world; solemnly placing the responsibility for the change upon the nation by whose laws the renunciation had been forced. This action has been approved and confirmed by the official vote of the Church in conference assembled."

There is one other phase of this subject that should not be overlooked. When the church announced definitely its abandonment of polygamy because the law demanded it, the question naturally arose among polygamist husbands: What is to be done about our plural wives? The opponents of polygamy cried with one voice: Abandon them! But the Mormon men, to their honor and credit let it be said, positively refused to do this. Their attitude plainly and simply stated was this: We married these women

under the teachings of our Church which we implicitly received as the word of God; when we did so we violated no law of either state or nation; now the nation says we must abandon them. This we cannot and will not do. We have pledged ourselves *to enter into no more such relationships*, but no power on earth shall make us consent to abandon the women that we made our legal wives and who are the mothers of our children. Time will remedy the matter. We and they will pass away, and thus, polygamy will receive its death.

It may be well, here, to recall that, according to high statistical authorities in the Mormon Church, never did more than *three per cent.* of male Mormons enter into polygamous relationships.

In reading the very varied attacks made upon polygamy one claim is insistently made, to which some attention must be given. *It is taken for granted* that polygamy essentially is based on the sensual nature of man, being merely a form of legitimatizing enlarged licentiousness. To this charge let George Q. Cannon reply, in a speech made before the House of Representatives, when, after serving in the 43rd, 44th, 45th, and 46th Congresses, a strong endeavor was made to deprive him of his seat. In referring to polygamy he said, among other things:

"In regard to licentiousness, concerning which so much has been said, I wish to say a few words. Do gentlemen understand that if the people of my Territory, those who are accused of violating law in having more wives than one — I say do gentlemen, in considering this question, not understand that if licentiousness and lechery were the objects to be accomplished, that the people could reach this in a much cheaper and much more popular manner than by marrying women and sustaining and making legitimate their children? Why, it needs no argument upon this point. The mere suggestion brings conviction to the mind of any person who reasons that the methods

in vogue elsewhere and which provoke no wrath would be much more likely to have been adopted to accomplish such a purpose if that had been the object."

There is one other phase of the subject that must be referred to before leaving the subject. For the purposes of sensationalism novelists, backed up by religious fanatics, persist in charging that not only is polygamy still secretly practiced in Utah, and other Mormon communities, but that it is deliberately planned for by the Mormon authorities and that polygamous marriages are still performed in their secret temples. In the introduction to a novel, *Ezra the Mormon,* that has had a large sale in England, the author openly charges:

"Many people believe that the old doctrine of polygamy has been stamped out, and for the benefit of such I would have it known that my story gives the exact words of *today's* secret polygamous marriage ceremonies, and the blasphemous initiation rites, with the exception of certain parts which were not fit to place before our English public."

The same kind of a charge is often made in America. I have traveled largely in Utah for nearly forty years; I have been entertained in scores of Mormon families; I personally know hundreds of Mormons and also of Gentiles in Salt Lake City and the state generally; I personally know many of the apostles, many of the quorum of the seventies, the bishops and others of the Church; I have personally spoken with three presidents of the Mormon Church upon the subject, and, again let me affirm, I have no sympathy with polygamy in any manner or form, but my eyes are as alert as *those of most men* and better trained to observe than those of many, and I protest against the untruthfulness of these charges of present-day polygamy. The leaders of the Church have solemnly avowed their abandonment of the practice, and so far as I know there is not the slightest scintilla of evidence to the contrary.

CHAPTER VIII

THE SALT LAKE THEATER

One of the noted buildings in America is the old Salt Lake Theater, built in 1861-2 by Brigham Young. Unlike the founders and teachers of other religions Joseph Smith not only believed in the drama and its allied arts, but warmly fostered them in the brightest days of his life in Nauvoo. Heartily backing up the prophet in his idea of giving to the Mormon people simple, and what they deemed, harmless recreation, Brigham Young, and others of the apostles, took active part in the amateur plays that were presented. Dancing was also actively indulged in, together with choral singing and the production of the great oratorios. It was natural, therefore, that orchestras and a brass band should be fostered to aid in popularizing these forms of entertainment.

After the martyrdom of Joseph Smith, and the exodus was determined upon, in no one thing did Brigham Young justify his assumptions of leadership more than in the way he almost compelled his saddened and heart-broken people to turn their thoughts from the awful and disastrous past, with its woes and sorrows, to the duties of the present and the marvelous possibilities of the future. Let these things be remembered, — the sufferings they had gone through, the murder of some of their loved ones, the destruction of their property, the abandonment of their homes, the hatred visited upon them, the forced leaving of the homes of their choice and affection, the sickness of their aged and young, and the consciousness, perhaps deep

in their inmost hearts, yet, nevertheless, insistent in its demand for recognition, that even their leaders did not know exactly whither they were going, and the further fact that their clothing and food supplies were very scanty, and it can be seen that they had little to make merry upon. Yet Brigham was as wise in practical leadership in small things of the moment, as in the larger things pertaining to his people, and therefore he had seen to it that there came to the "Camp of Israel," Captain William Pitt's brass band. Accordingly, when on that 1st of March, 1846, they camped on Sugar Creek, — after their first day's march of five miles of that never-to-be-forgotten exodus across the trackless plains, deserts, canyons and mountains to the, as yet, unknown Utah, — they pitched their tents upon the hard frozen ground, from which the snow had been scraped, built large fires, had their supper, engaged in worship and prayer, and then Brigham and the other leaders called upon the "brethren" and "sisters," to engage in the dance. The band played the merriest airs, and all that could, from the youngest to the oldest, engaged in the fun-making, and several Iowans, who were attracted to the camp out of curiosity, went away saying they could scarce believe their own eyes at seeing a people, fleeing from civilization after enduring persecution unexampled in American history, thus passing away their time.

But Brigham knew the philosophy of "whistling to keep up one's courage," the true wisdom of joining in the universal symphony no matter how sad or depressed one might feel, and this practice of dancing and merry-making was kept up on all of the weary journeys across the plains.

On their arrival at Salt Lake City, while imperative demands were made upon the time and energy of the people, the dance, music and the drama immediately engaged Brigham's serious attention. The singers of the Nauvoo and other eastern choirs became the Tabernacle

choir; and in 1850 the first play was given in the "Bowery"—an edifice made half of lumber, half of boughs,—located on the Temple Block.

Two years later the Social Hall was opened and here for ten years the Mormon pioneers engaged in music, dancing and the drama. Hiram B. Clawson, who had joined the Mormons and had played in the theater of Nauvoo, was practically in charge in Salt Lake, and gave great delight through the plays which he produced.

During this time Brigham Young saw that a more permanent temple for the drama was needed, so in 1861 the foundations were laid for a new theater and the walls erected by October. On Christmas day the roof was on and on Thursday, March 6, and Saturday, March 8, 1862, the dedication occurred, the two nights being required on account of the large request for invitations and demand for seats. The architect was William H. Folsom.

Mr. B. Leavitt, the famous theatrical promoter in his *Fifty Years of Theatrical Management* thus speaks of the Salt Lake Theater:

"At the time of its erection, it was not surpassed in magnitude, completeness and equipment by any other existing house. Its stage, 130 feet deep, remains the most capacious of any in this country."

The dedication exercises consisted of addresses by Brigham Young on "The Capacity of the Human Body and Mind for Development," Heber C. Kimball, and John Taylor. In his address Brigham Young declared: "If I had my way, I would never have a tragedy played on these boards. There is enough of tragedy in every-day life, and we ought to have amusement when we come here."

He admired dancing but deprecated waltzing. He originally insisted that all entertainments should be conducted under the terms of strictest morality. In the earlier days of the drama in Salt Lake City he personally attended nearly all the rehearsals. He had his private carriage con-

vey the actresses to and from the hall on every occasion, so as to avoid the society that might embarrass them after the performance.

The rehearsals of both plays and dances invariably were opened with prayer, and smoking and drinking were absolutely prohibited. He always insisted that the play-house ought to be as sacred as the Temple or the Tabernacle. While he was a real autocrat, he would not always insist upon the rigid enforcement of his rules, but improper conduct on the part of the performers always resulted in their instant dismissal and disgrace.

He was a splendid fireman about the theater, and took every possible precaution against fire. Once, when George Francis Train was delivering a lecture in the theater, two or three of the coal-oil footlights began to smoke and flare. He stepped quietly out of the stage box, strolled over to the lamps, and, with his broad-brimmed hat, wafted out the lights and returned to his box without any remark.

Under such auspices as these the drama was bound to flourish. An amateur organization of players was formed, and with many vicissitudes, in one form or another, continued its existence for over fifty years. Professionals of recognized ability were engaged to train the players, the first being Thomas A. Lyne, who, as far back as 1842, had thrown in his lot with the Mormons in Nauvoo. In 1863 he rejoined his former friends and associates, but he was not long content to remain merely as the coach for others. From the old bills we find him performing in such dramas as "Damon and Pythias," "Richelieu," "Othello," "Richard III," "William Tell," "A New Way to Pay Old Debts," and the always favorite "Pizzaro."

Horace G. Whitney, in his interesting *The Drama in Utah,* says of this epoch:

"It is doubtful whether in all the annals of the drama, a more unique condition could be found than that which

existed in the Mormon playhouse, when T. A. Lyne arrived in Salt Lake. It was eight years before the advent of the railroad, and the theater had been built entirely of timbers from the mountains, native stone, and adobes. Yet all the appointments of the house (except the seats, which were wooden benches), were as complete as those in the large eastern cities. Artists, like Ottinger and Morris, provided scenery for all the plays. A large wardrobe for ancient and modern dramas was kept on hand in charge of Robert Neslen, C. Clive, Mrs. Maiben and Mrs. Bowring; a small army of supers could be clothed in fashion historically correct at any time. John Squires, wig maker and barber, saw that every character in the dress plays was provided with suitable head-gear before he or she stepped on the stage; a captain of supers was responsible for the appearance of his men whether they were Indians, courtiers, slaves, or the army of Richard III. Harry Horsley, the veteran street car conductor of today, won his first spurs as super captain, and later became locally famous as the waiter who bore the baby Maude Adams across the stage upon a platter; the fine old green-room, then the place where the actors met to receive their parts from the stately stage manager and occasional player, John T. Caine, (now the dressing room of visiting stars) contained a huge mirror, where each character surveyed himself or herself just prior to venturing before the audience, and where fellow players passed judgment upon the costumes, and makeups; Charlie Millard, most ingenious of property men, could turn out anything from a throne to a mouse trap, and manufactured all the fire works, lightning and thunders that any demon required, while William Derr, in charge of the lighting, though limited to coal oil lamps, produced some illuminations of which the house had no reason to be ashamed. As for music, there was an orchestra of twenty, and when choral effects were desired, as in Macbeth, the whole strength of the tab-

ernacle choir could be called on. In fact, Mr. Lyne, fresh from a chain of eastern theaters, was wont to say that nowhere outside of the houses of the great populous cities, and in but few of them, was there such completeness of stage appointments, scenery and accessories as were found in Brigham Young's theater, in the heart of the Rockies in 1862."

Alfred Lambourne, the poet-artist, succeeded Ottinger as scene painter of the house. In his poetic work, *A Playhouse,* speaking of conditions at the Salt Lake Theater in these early days, Lambourne says:

"In my mind's eye, I do not see the Playhouse, as it now is, overlooked by buildings higher than itself, but as the structure was when its bulk entirely dominated all that was around it. How calmly imposing it used to appear, how grandly massive it showed in the twilight, or when the moonlight was falling on its white walls! I, for one, could not go from home to the Playhouse, without passing through and inhaling the odor of the Artemisia and the sunflower. The odor is mixed up in my mind with the first seeing of many a great play. But how can I bring back to your understanding those times? How suggest the indefinable something that then existed — out amid the semi-solitude, the isolation? How am I to recall the humorous earnestness, the fineness or roughness of fibre, the pathetic side, the laughing determination of religious pioneer life as associated with the theater? Yet such are all mixed up again, with my memories of the Playhouse.

"Swing a circle around the Playhouse — I mean as it was in those early days: swing a circle of hundreds, of thousands of miles, and how unique it was! Men who assisted in the building of that theater acted upon its stage. That was the strong time of the legitimate drama. Even the people in the isolated West became connoisseurs. In this particular Playhouse people would go to perform-

ances, not to see a new play, but to see some new actor or actress in the old parts. Each star, man or woman, as they stepped upon the boards, was tested by the acting of those who had gone before. 'Damon and Pythias,' 'Pizzaro,' 'Virginius,' 'The Duke's Motto,' 'The Man with the Iron Mask,' and the like plays, not to mention those of the Bard of Avon, were those in which newcomers were held to the lines. How many times, in that Playhouse, did I not see Shakespeare's masterpiece? How many actors did I not see play 'Hamlet?' Pauncefort, Lyne, Adams, Kean, McCullough, Davenport, Miss Evans, Chaplin, Barrett, Booth — that is not half!

"The greater number of actors and actresses who belonged to the regular stock company of the Playhouse, and who supported the stars, had crossed the plains and mountains in ox or mule trains, and one, I believe, in a hand-cart company. And who were their critics? Men and women who had done the same. There was a peculiar sympathy between those who acted upon the stage, and those who comprised their audience. Many a man who watched the play at night, had done the roughest of pioneer work during the day. Perhaps he had 'grubbed sage' for an order for a theater ticket; perhaps he had toiled in the fields, irrigated an orchard, or dug on a water ditch. Perhaps he helped in building a saw-mill, or at blazing a trail up to the mountain pines. It may be that he had brought down a load of logs and stood thereafter, for many hours in rain or shine, in the wood yard opposite the Playhouse, until he sold that load of fire-wood, and the pay that he received for it might have partly been used for his theater admission fee. There was, indeed, a strange bond existing between the stage and the auditorium. All were friends; they would meet in daily labor, they would dance together, they might bear 'their testimony' in the same meeting house, or listen to the same sermon on the coming Sunday. Every actor was a

'Brother,' every actress was a 'Sister.' Their salaries were partly paid in that which had been received by the Church as religious tithes. The man who guffawed at the comedian might talk with him on the morrow, whilst he chiseled granite on the Temple Square. Another who watched the tragedian might visit him during the coming week in the capacity of a 'Teacher.' Those who sympathized with the hero and heroine of the play, might soon meet them in social intercourse of a 'Surprise Party,' and they might tell how they 'Crossed the Plains,' in the same 'company.' All were one big family, Thespians and audiences, performers and watchers. And more than this, each and every actor was liable to be 'Called on a Mission' to Europe or to 'the States.' Again, each and every actor was liable to become a Church official, and each and every one of the actresses to become a worker in the 'Relief Society.' On the morrow, perhaps, all would look with the same emotions on the great, watchful mountains, and take a like interest in the planting of trees and vines, or it may be, the setting out of a flower garden. All were alike interested in bringing about that miracle — when the desert should blossom as the rose.

"Do you think I put it too strongly, my friend? Not in the least. Certain of these facts justify me in the claim that this Playhouse and that theatrical organization were unmatched by any other in the world."

In his *Recollections of a Player,* James H. Stoddart, the comedian, tells of his coming to the old theater to play "Saints and Sinners," with an amateur organization. He confirms the extravagant praise in one regard:

"We had only two rehearsals, and it would have astonished many old professionals to have seen the careful attention, earnestness, and ability displayed by my Mormon associates."

Mr. Leavitt speaks in similar eulogistic strain:

"My first visit to Salt Lake was in 1869, on my way

to California, and my acquaintance with the Salt Lake Theater, its people and its association has always been of the most pleasant character. I found its management ever liberal and scrupulous to the last degree, fulfilling every obligation of their contract without question or demur, never seeking by any form of evasion or advantage to deprive me or any of my attractions of a penny due them.

"They invariably lent every assistance possible to make the business large and profitable, and in all things were eminently fair and just. I often reflect upon the integrity of the Mormons as I found them, and deplore the fact that in men of no other faith have I ever found it to so full and satisfactory a degree.

"I find peculiar pleasure in referring specifically to one old member of the Salt Lake Theater Company, born November, 1848, at the foot of the Wasatch Mountains, near Salt Lake City, in a log hut in which buffalo hides were the doors and windows. She grew up as a girl in Salt Lake City, and made her debut on the stage of the Salt Lake Theater on August 25, 1865, as Grace Otis, in 'The People's Lawyer,' since which time she has been identified and revered by all stage folk. This was Mrs. Asenath Kiskadden, now Mrs. Annie Adams. She has her replica in her daughter Maude Adams, the idol of the English-speaking stage.

"After playing at the Salt Lake Theater for nine years, Mrs. Adams went to Virginia City under the management of Uncle John Piper, and at the close of her engagement there, she joined the Hooley Company, in 'The Two Orphans.' Later, she appeared at the Baldwin Theater, San Francisco, under Thomas Maguire, supporting Barry Sullivan, along with James O'Neil, Louis James, James A. Herne, David Belasco, Louise Hawthorne, Annie Firmin and W. R. Crane.

"Afterward, at the same house, she supported Lewis

Morrison and Rose Wood, in 'A Celebrated Case,' and her daughter Maude was engaged for the child Adrienne. Thence, mother and daughter went to Portland, Oregon, and for several years supported many of the stars who went to the Coast. She came East in 1881, and supported Charlotte Thompson, and for a number of years remained in the East under the management of Charles Frohman.

"She now lives at Salt Lake, appearing occasionally with a stock company playing there. She makes her home with her mother, who is eighty-four years of age, and says that she hopes to continue her work even unto the second childhood period, 'for I am fond, very fond of the profession and its dear people, of whom, in contemplation of forty-five years of association, I can truly say I have not one unpleasant thought, not one bitter memory.'"

In 1863 Mr. and Mrs. Selden Irwin appeared and delighted their audiences with comedy and romance, and the following year, the scholarly George Pauncefort, with his co-star, Mrs. Florence Bell, created a sensation with "The Romance of a Poor Young Man." Pauncefort and Lyne soon joined hands and together exercised a tremendous influence, not only on their audiences, but upon the young players who were growing up around them.

And so the roll might be called. Julia Dean Hayne in George B. Waldron's company — once the sweetheart of Joe Jefferson — came and stayed ten months. Then came C. W. Couldock and his daughter Eliza, with such plays as "The Willow Copse," from which "Hazel Kirke" was afterwards produced. In 1868 Charlotte Crampton, the noted star, who played male parts, came, followed by E. L. Davenport (father of the noted Fanny), who danced a famous sailor's hornpipe with Sara Alexander. Then Parepa Rosa appeared and gave three concerts, John McCullough, with twenty-three performances,

THE OLD SALT LAKE THEATER, SALT LAKE CITY.

James A. Herne, McKee Rankin, J. K. Emmett, Milton Nobles, and Mr. and Mrs. F. M. Bates with their baby, afterwards famous as Blanche Bates.

Year after year saw the roster of famous names grow, until the change in public taste arrived which prefers cheap vaudeville, and this almost emptied the galleries and at the same time rendered large risks inadvisable.

What, then, will become of the famous old theater? Once proudly dominating that portion of the city where it was built, it is now far overtopped by modern sky-scrapers. It no longer looks what it used to be. One knows it is old as he stands and sees it for the first time. Forbes-Robertson, on the occasion of his last visit to Salt Lake, pleaded with the people to cherish and preserve such a rare treasure-house of memories — almost the last theater of its kind in America. Scores of other artists have echoed his desires in words of their own. What will the future do with it? *Quién Sabe?*

CHAPTER IX

EDUCATION IN UTAH

It has been well said that the intelligence and progressiveness of a community or state may be determined by its interest in the education of its youth. If this be a truism, then Utah can claim to be in the front rank of the intelligent and progressive. Few states have formulated so thorough and advanced an educational program, which the officials are conscientiously seeking to carry out.

And yet it used to be the fashion to revile Utah as not interested in education. Brigham Young was again and again charged with deliberately seeking to keep his people in ignorance. Indeed, this was one of the stock arguments of those who attacked Mormonism in its earlier years. This in spite of the fact that before the exodus from Nauvoo a great university was planned, and nothing but the fierce persecution of the Church and the driving-out of the Mormons prevented its erection, and the further fact that the very first winter the Latter-day Saints spent in Salt Lake Valley saw the opening of a school. In 1850 the legislature incorporated the University of Deseret, which has since developed into the magnificent modern institution, the University of Utah. The Mormons, like the Catholics, Methodists, and all other religious bodies, believe in their own Church schools, but they also believe in and sustain the public schools as a matter of general good policy and helpfulness to the state. Hence they have their Latter-day Saints University at Salt Lake City, the Brigham Young University at Provo,

STATE AGRICULTURAL COLLEGE, LOGAN.

the Brigham Young College at Logan, the Snow Academy at Ephraim, the Academy of St. George, and others. These are all of secondary or college grade, there being no attempt on the part of the Church to provide elementary education, and thus duplicate the work of the public schools. Yet, as is the avowed intention of all churches, the religious leaders did not wish to ignore what they regard as the most important portion of a child's education, viz., the religious. Hence a method of co-operation has sprung up between the high schools and the Church, which meets the needs of the Mormon leaders. A seminary is erected by the Church as near to the high school as possible and provided with college-trained teachers. When not enagaged in their studies in the high school, doubtless at set periods, the pupils go to the seminary, where they are given regular courses in the Bible, the Book of Mormon, Church history and doctrine, etc. There are nineteen of these seminaries now in existence, with an enrollment of over 3,000 students.

But it is not so much of Church schools and education that this chapter is to treat. In 1919, the legislature of Utah so amended and enlarged its educational laws that they were entirely rewritten. To make this legislation effective an "Educational Drive" was held in practically every community in the state. A speakers' organization was effected, composed of over 100 men and women, conspicuous for their abilities and public services. These went out in teams to every district in the state, where local committees met them, banquets were given, great demonstrations in the form of parades and artistic pageants, etc., opened the local campaign. Press, pulpit and poster alike aided in the campaign, and a most effective pamphlet, entitled "Better Public School Education in Utah," was taken by the school children to every home in the state. This brochure contains, beside much excellent argument and eloquent pleas for fuller education, facts stated in

poster form, easily read and eye-compelling. Here is one:

UTAH'S SLOGAN

BETTER SCHOOLS FOR
OUR BOYS AND OUR GIRLS

BETTER PAY FOR TEACHERS

BETTER SERVICE FROM TEACHERS

IF WE ARE TO ACCOMPLISH ANYTHING
WORTH WHILE THE PUBLIC MUST

TALK ABOUT IT

WRITE ABOUT IT

FIGHT FOR IT

UNTIL THEY GET IT

Another page shows strikingly Utah's lead in girls and boys, being 29 to each 100 of the population as compared with 25 in Idaho, 24, 23, 22, in Arizona, Colorado and Washington, and 19 in California. Still another shows that while Utah produces $155,000,000 annually in its manufactures, $86,000,000 in mining, $22,000,000 for hay, $11,000,000 in sugar beets, and $8,000,000 in wheat, it spends only $5,400,000 in education, concluding with the forceful line in black letters: WE MUST INVEST MORE IN EDUCATION.

In addition the new laws provide for part-time education of boys and girls who, through economic necessity, are compelled to go to work before their school age is past. Every child is compelled to register once a year, so that tabs can be kept on him. He must be either at school or at work until he is eighteen years old. Every child, too, is urged to participate in some out-of-school organization, such as boy scouts, camp-fire girls, Mutual Improvement Associations, Sunday Schools, glee clubs, town bands, orchestras, choirs, and thrift clubs. The

youth who avail themselves of the part-time education gladly welcome the chance to pursue the studies that industrial conditions and present day living cut them off from taking in the regular whole-time schools. They are boys and girls of a practical turn of mind. They know well the subjects that will help them in their deficiencies and what will aid them in the occupations they have entered as wage-earners. They throng the classes in the common branches; they get the basal principles of citizenship and health; they have courses in machine shop, electrical practice, auto repair, typewriting, sewing, cooking, dressmaking and nursing.

Another feature is health education, many phases of which are admirable, such as the inculcation of ideas of cleanliness, sanitation, correct heating and lighting, etc., but there is danger here of medical despotism that never benefits and always injures.

Those features of the law, however, that deal with Civics, Americanization and Vocational Training are above criticism.

The new course in civics requires participation by each child in the activities of the school, home and community.

Every child must participate in the government of the school. He must help formulate the laws he is expected to obey and be given responsibility for good conduct in the school, on the grounds, and in the community.

He must feel that he is a part of everything and everything is a part of him.

He must participate in the civic affairs and organizations of his community and be held to some worthy civic achievement, such as beautifying his home, assisting in a clean-up campaign, or helping to put over some civic improvement in his town.

He must possess a civic conscience and reach a high standard of civic attainments before promotion from his grade or graduation from high school.

The schools must provide the *universal intelligence* required for good citizenship.

In the campaign for Americanization Utah was urged by the fact that of its population 90,000 are foreign-born, and of these 30,000 are unable to speak English. Many of these work in the mines and the smelters. The educators realize that foreign labor is essential to Utah's industries. None of the major industries could continue if foreign labor were removed.

The intelligence and patriotism of the foreigner is the measure of the industrial efficiency of the state. Men are valuable to society in proportion as they are willing to work in harmony with other men. It is the business of the state to make possible this harmony. A common language and common ideals of government are the basis of cooperation and citizenship.

The aims of the Americanization Law of Utah are:

1. To teach the American language.
2. To give the foreigner a basic idea of democracy.
3. To promote confidence and hope as a ground for cooperation.
4. To counteract un-American propaganda.

No state can be greater than its people. America was a great land when Columbus discovered it. Americans make it a great nation. It is therefore not only good business, but a sacred obligation of the state to take care of all of its people.

The same practical aims direct Vocational Education. A majority of the people of Utah are engaged in vocational activities. It therefore becomes the duty of the schools to aid this vast body of workers. To this end practical courses are offered in all the high schools and colleges in Homemaking, Agriculture, Business Training, all the trades and industries and mining. The aim of the teacher is to show the dignity of labor, to prove that intelligence is the basis of efficiency, that joy comes from

EAST SIDE HIGH SCHOOL, SALT LAKE CITY.

work well done, that life is labor, and to live is to serve.

Another splendid feature is the use of natural objects, out-of-doors, where possible, rather than books. Thousands of things can better be taught the child by personal contact than by reading. Garden plots are provided, nature studies of every kind encouraged and the children urged to all good initiative on their own behalf, instead of being fettered to a few pages in a book, which they must learn parrot-like whether their understanding is engaged or not.

Indeed a strong point is made from the lowest grade even to the University that no man or woman is educated who is merely a theorist, and has no practical, applicable knowledge of a subject. The deeply read student who "knows a lot but can't do nothin'," is as much abhorred as the unread, narrow, limited slave to his tools, who "works a lot but don't know nothin'." Both must receive a larger, wider outlook and a more practical vision.

To interest the pupil the same things are not taught year after year. New subjects are introduced every year for four years, and then brought up again. And every subject is vitalized and related to actual life as far as possible. From the fifth grade through the eighth, in every school, attention is intensified in making things, or in studying growing things, or live things, or in studying social and civic life. Thus vitalizing and rotating each subject, every child is interested and is ready to "fit in" to active life when the school period ends.

Thus Utah is determined to achieve competent citizenship for its children. It is a high ideal, one worthy a great state, and as it is *now* working out, will soon put Utah, educationally, first in the states of the Union.

Another thing I wish personally strongly to commend. No public school teacher who uses tobacco in any way is allowed to hold his position if the fact is known, and the whole force of the decent element in the state, both Mor-

mon and Gentile, is now devoted to a campaign against the use of the narcotic weed. Here is a part of the printed campaign against tobacco:

"Tobacco is a nerve depressant, and thus strikes a telling blow at the user's ambition, without which no one can hope to succeed.

"Boys and young men who use tobacco are almost invariably behind in their school work.

"Tobacco strikes directly at the heart, lungs, and circulation, resulting in under-nutrition and impaired physical development.

"The tobacco habit is invariably acquired without the knowledge or consent of parents, and thus leads directly to the practice of deception.

"The habit takes boys away from their homes and out into undesirable places where the pollution of morals often follow.

"Nearly all of the boys and young men who are sent to juvenile courts and detention homes are users of tobacco.

"Successful business men who are now using tobacco almost invariably acquired the habit after reaching maturity, and are now succeeding in spite of the habit and not because of it.

"No young man going through life with reduced efficiency can hope to succeed along with those who are perfectly normal.

"And, let it be recalled, successes and failures in life are commonly determined upon very narrow margins. A man who can make a mouse trap or an ocean liner even slightly better than his competitors will succeed while others fail.

"The use of tobacco, therefore, is a handicap to success in life. It impairs every activity of the human organism and results frequently in mental and moral degeneracy.

"*What is the duty of the schools in this particular?*

UNIVERSITY OF UTAH, SALT LAKE CITY.

"The State Board of Education has decided that freedom from the use of narcotics shall be a requirement for graduation from high school.

"Where do you stand on the question?"

Note well that requirement for graduation.

Thus, in swift outline, I have given an idea of Utah's educational program. Did space permit it would be a pleasure to reproduce photographs of many of the fine public school buildings of Salt Lake City and elsewhere in the state.

The University of Utah deserves especial mention. It is located upon a commanding site in Salt Lake City, overlooking the city, the great lake and the valley, with the towering ranges of surrounding mountains. No state university in the country has a more glorious outlook, and well do the majestic and stately buildings deserve so dominating a location. The buildings are all modern and equipped with all the latest devices for the furtherance of their special purposes that experience and ingenuity have been able to devise. Professionally it is making its own way, in forceful western fashion. Its last president was a western man, Dr. John A. Widtsoe, and an expert on dry farming, as well as proven executive of power.* His faculty contains many young western men, in the prime of life, dominated by the western spirit, controlled by no conventionalities in education, but eager for the newest, the best, the most natural. Most of them are out-of-door men, making their own investigations and compelling their students to read the variedly fascinating pages of the book of nature, rather than confine themselves to printed words. It is a joy to meet them either in the lecture-room or in the forests, among the wild flowers, in the canyons among the ruins of the civilization of the past, or studying the stratigraphy or paleontology of the strata of

*As stated earlier, Dr. Widtsoe resigned the presidency just as this book went to press. His successor was not yet appointed.

the earth's crust. Every department of human education is handled, and in accordance with the most approved modern methods, while new methods are being tried and personal initiative encouraged. The result is an institution that is not only an honor to Utah, but to the whole West, a school that is growing in influence and power and that is having a large part in shaping the future destinies of the state.

It should not be forgotten that besides the public schools and the University, and the various Mormon academies and colleges, there are church schools throughout the state conducted by Catholics, Episcopalians, Methodists, Presbyterians and Congregationalists. All these are doing the educational work required of them.

Thus is Utah caring for the instruction of its young. Whatever may have been the condition of education in the earlier years, and the wrong impressions the outside world gained about it, there can be no question of Utah's progressiveness today, for United States Commissioner of Education Claxton declares that there is less illiteracy in Utah *now,* than in any other state in the Union.

CHAPTER X

THE GEOLOGY OF UTAH

I much doubt whether, all things being considered, there is another state in the Union that, geologically, can be compared in interest with Utah. Not even California, with its great mountain ranges, its Yosemite, King's River Canyon, Lake Tahoe region, Colorado Desert, Coast line and Channel Islands; not even Arizona with its Grand Canyon, Mogollon Buttes, Sunset Crater, Painted Desert, White Mountains and Coconino Plateau can surpass it — though, of course, its interests are of a different character, its geological history strongly individualistic.

A score of travelled, literary or geological masters, including Bonneville, Fremont, Stansbury, Beckwith, Blake, Engelmann, Whitney, Hayden, Bradley, Poole, Clarence King, Hague, Emmons, Howell, Gilbert, Peale, Russell, Powell, Dutton, and others have written more or less about the geological features of the Great Basin. This singularly appropriate name was first given to it by Fremont. Yet how few there are who realize the vastness of this great inland system of drainage that has no equal on the American continent and few superiors in the world. Extending from the Wasatch and Uinta ranges on the east, reaching across northern Nevada and striking north-west into northern Oregon, sweeping around and south through Modoc county, California, taking in the eastern slopes of the Warner Spur of the Sierra Nevadas, and then clear down the whole line of the Sierras into the peninsula of Lower California and up again, by a winding

line which includes the Colorado Desert of southern California and a part of southern Nevada to the southern part of Utah. Think of a watershed reaching from 111° to about 121° and rising to the 44° parallel and down as far as the 32°. Its general form is rudely triangular, with the most acute angle southward. The extreme length in a direction somewhat west of north and east of south is about 880 miles, the extreme breadth from east to west, in latitude 40° 30′, is 572 miles, and the total area is approximately 210,000 square miles.

Within this area, of course, is included much that does not come within the scope of this chapter, but even though limited to the confines of the one State of Utah, there are special geological features enough to occupy any one mind for a long and laborious lifetime.

In the chapter on the Literature of Utah I have briefly sketched several scientific monographs, to which the reader interested in geology is referred. These monographs give proof of Utah's geological supremacy of interest. Indeed, the moment one stands in any commanding position overlooking Salt Lake City and the valley of the lake, his curiosity is profoundly aroused.

First of all is the lake and its striking terraces. These are but a part of the Great Basin, a geological wonderland in itself. In the third volume of the *Report of the Wheeler Surveys,* G. K. Gilbert discusses the unusual and remarkable features of the Great Basin Ranges found in Utah and elsewhere, and the Colorado Plateau system, together with the peculiar geology found in the border land between the ranges and the plateaus. He gives us new ideas as to the depth of the detritus washed down from the adjacent mountains to form the desert, the greatest depression of which is now occupied by the Great Salt Lake.

Many years later, Gilbert issued another monograph, entitled *Lake Bonneville,* dealing more particularly with

WASATCH MOUNTAINS FROM LIBERTY PARK, SALT LAKE CITY.

the prehistoric lake, its history and the causes of its disappearance.

Now let the visitor look across the valley to the Oquirrh range, and the scars made by the copper mines in Bingham Canyon. For knowledge pertaining to these, with a full account of the geological conditions involved, let him read *The Ore Deposits of Utah,* which also gives a wonderful cursory survey of all the known ore bodies of the state.

When the United States geologists first began to explore this western country they were profoundly impressed by the remarkable scenery of the Uinta range. One of them wrote:

"The scenery of this elevated region is singularly wild and picturesque, both in form and coloring. In the higher portions of the range where the forest growth is extremely scanty the effect is that of desolate grandeur; but in the lower basin-like valleys, which support a heavy growth of coniferous trees, the view of one of these mountain lakes, with its deep green water and fringe of meadow land, set in the somber frame of pine forests, the whole inclosed by high walls of reddish purple rock whose bedding (stratification) gives almost the appearance of a pile of Cyclopean masonry, forms a picture of rare beauty."*

These same geologists remarked upon the many evidences of glaciation found in this range, and in 1876, Major J. W. Powell, Director of the United States Geological Survey, published his interesting monograph on the Uinta Mountains. It was while making the studies for this report that he determined that an exhaustive examination should at some time be made by an expert into the history of the glaciers which had so materially shaped this interesting range. Accordingly Wallace W. Atwood was appointed to the work, and 1909 his inter-

*Geol. Explor., 40th Par., Vol. 2, p. 194.

esting and instructive monograph, *Glaciation of the Uinta and Wasatch Mountains,* was published. The following quotations are all from this work:

"The oldest formation exposed in the region studied is the pre-Cambrian Quartzite. This formation constitutes the main body of the range and is exposed throughout the central plateau portion."

Above this formation are found in greater or lesser thickness of strata Cambrian shales, Ordovician quartzite, Mississippi quartzites and the Pennsylvanian series. The following "Permo-Carboniferous" beds appear as narrow, discontinuous belts in the foothills of the range. Then come the Triassic, the 600 to 800 feet thickness of the Jurassic limestones, followed by Cretaceous, consisting of over 10,000 feet of conglomerates, sandstones and shales.

"Near the close of Cretaceous time a powerful orographic movement disturbed the formation in the region. The great Uinta anticline began to rise. As the elevation increased the forces of degradation became more powerful, and in the long period of erosion that ensued these forces greatly reduced the level of the range. Thousands of feet of rock strata were removed and deposited over the lower countries to the north and south. On the flanks of the mountains broad areas of inclined strata were truncated and probably the entire range was brought to the peneplain stage."

Upon the truncated strata rest the Tertiary formations, consisting of sandstones, shales and conglomerates of loose texture, and in places with the materials not cemented.

All these formations have contributed in varying amounts to the glacial drift of the region. The pre-Cambrian is the chief contributor to the drift.

"All the great canyons of the Uintas head near the crest of the range and descend approximately to the north

A Glacial Lake in the Wasatch Range

From a painting by H. L. A. Culmer. In the author's private collection

or to the south. Since the axis of the range is nearer the north than the south margin, the canyons on the north slope are shorter than those on the south slope. All of the larger canyons have the characteristic U-shaped form due to glaciation. Their upper portions have been well cleaned out by the ice, but their middle and lower portions contain heavy morainic deposits."

It is interesting to study the differences in the streams which flow respectively north and south of the range.

"Evidences of at least two epochs of glaciation appear in the region of these two epochs; the earlier was presumably the longer, for the ice of that epoch was thicker and extended farther down the canyons than the ice of the later epoch. The lower limits to which the ice descended on the north slope in the earlier and later epochs are approximately 8,000 and 8,400 feet respectively. On the south slope the lower limits during the earlier and later epochs are approximately 7,000, and 8,000 feet respectively."

The report then goes on to discuss in detail the phenomena, presented in the various canyons of the north slope, as Swifts, east fork of Swifts, south fork of Weber River, Smith and Morehouse, the Weber Canyon system, Bear River system, Hayden Fork, Stillwater Fork, Blacks Fork, Smith Fork, Henrys Fork, west and middle forks of Beaver Creek, Burnt Fork, west and east forks of Sheep Creek and Beaver Creek system, and on the south slope including Ashley Fork, Dry Creek, White Rocks, Uinta, above which rises Mt. Emmons, 13,428 feet, Lake Fork, Rock Creek, Duchesne, Soapstone, Provo, Boulder Creek and Shingle Creek.

Certain *nevé* fields were located, and interesting revelations noted of landslides.

In the Wasatch range, within an hour or two's ride of Salt Lake City most interesting evidences of glaciation can also be studied in Little and Big Cottonwood Can-

yons, and as these canyons are twelve and fifteen miles long, respectively, they afford the student many proofs of glacial action.

In such ranges as the Uintas and the Wasatch another lesson is taught with great clearness. It is that mountain ranges are not all formed by the strains set up by the shrinking of the earth's crust or envelope by the secular cooling and shrinking of its interior. The plicated structures of the mountains of Europe and the Eastern United States were such as to lead naturally to such a conclusion, as were also the indications of the Sierra Nevada and other Pacific Coast ranges, but when the geologists went into Utah, Colorado, Arizona and New Mexico they found an entirely different process had been at work. This is luminously discussed by Captain Dutton in his monograph on *Mount Taylor and the Zuni Plateau,* elsewhere referred to. In this he shows that while the mountains of these interior regions disclose whatever they have to tell of physical geology with marvelous clearness and emphasis, there is no teaching more clear or more emphatic than the absence of plicating forces from among the agencies which have built its magnificent ranges and lifted up its great plateaus. The country at large shows no trace of a widespread, universal, horizontal compression such as is found in the regions of uplifted plicated mountain structures. On the contrary, there is an absence of all such stress, and proof that these mountains have been raised by vertical forces acting beneath them. What these forces are is, as yet, unknown.

Another interesting geological feature which was first called to the attention of world geologists in Utah is found in the peculiar formation known as the San Rafael Swell. This is located in Emery County and has formed the ground work for scores of studies of somewhat similar conditions found elsewhere. Captain Dutton thus gives a general description of it:

"If we ascend the (Wasatch) plateau and ride eastward a very few miles, there suddenly breaks upon the view a vast and impressive panorama. From an altitude of more than 11,000 feet the eye can sweep a semicircle with a radius of more than seventy miles and reach far out into the heart of the Plateau country. We stand upon strata of Lower Tertiary age, and beneath our feet is a precipice leaping down across the level edges of the beds upon a terrace 1,200 feet below. The cliff on which we stand stretches far northward into the hazy distance, gradually swinging eastward and then southward through a course of more than a hundred miles, and vanishing below the horizon. It describes, as we well know, a rude semicircle, around a center about forty miles east of our standpoint. At the foot of this cliff is a terrace of greatly varying width, rarely less than five miles, consisting of upper Cretaceous beds nearly but not quite horizontal. They incline upwards towards the east at angles rarely so great as 3°, and are soon cut off by a second cliff plunging down 1,800 feet upon middle Cretaceous beds. This second cliff describes a semicircle like the first, but smaller and concentric with it. From its foot the strata still rise gently towards the east through a distance of about ten miles, and are cut off as before by a third series of cliffs concentric with the first and second. For the fourth and fifth time this process is repeated. In the center of these girdling walls is an elliptical area about forty miles long and twelve to twenty miles broad, completely surrounded by mural escarpments more than a thousand feet high. This central spot is called the *San Rafael Swell,* and it is full of interest and suggestion to the geologist."

Captain Dutton then goes on to show that the chief lesson here taught is the stupendous fact that:

"A body of strata more than 10,000 feet thick and more than 500 square miles in area have been swept off from the surface of the swell; that nearly 9,000 feet have

been removed from a much larger annual space around it; 7,000 feet from a still larger and remoter space; and so on with expanding annuli, from which successively decreasing amounts have been denuded."*

One of the least known and yet geologically wonderful portions of Utah, are the Henry Mountains, located in a rude and imperfect triangle, with the Colorado River as the base, the Fremont (or the Dirty Devil) River to the northeast and the Escalante to the southwest. They were named by Major J. W. Powell, Director of the United States Geological Survey, after Professor Joseph Henry, the world-famed physicist and secretary of the Smithsonian Institution. At the time of their discovery and naming by Powell they were in the center of the largest unexplored district within the United States, — a district which by its peculiar ruggedness and inaccessibility had turned aside all previous travelers. It is still little known save to the explorer and geologist. It is a region of wild fascination, of marvelous geological formation and peculiar revelation. Page after page of the stone book of Creation is here opened wide for the student to read, and this, at present, seems to be its chief use to man — this, and to afford to sight-seers an opportunity to gaze upon panoramas of unequalled splendor of color, individuality of form, and strange inutility in view of man's physical requirements.

For the same general causes that have rendered the region so difficult of access and passage have made it a desert, with little present economic value. The physical conditions of elevation and aridity which have caused it to be so deeply carved in canyons, have prevented the streams with which it is scantly watered from being bordered by tracts of land which can be irrigated; and agriculture without irrigation being in that climate an impossibility, there is nothing to attract the farmer. There are prac-

*Second Annual Report U. S. Geological Survey, pp. 54-57.

tically no valuable minerals in the mountains, hence there is no inducement to the miner. While there is timber upon the slopes and coal near at hand, neither are near enough to transportation facilities to render them valuable. Only for grazing have they any money value, hence few save cowboys and sheep-herders know anything of the region.

Professor G. K. Gilbert thus describes these mountains:

"The Henry Mountains are not a range, and have no trend; they are simply a group of five individual mountains, separated by low passes and arranged without discernible system. The highest rise about 5,000 feet above the plateau at their base and 11,000 feet above the level of the ocean. Projecting so far above the surface of the desert, they act as local condensers of moisture, and receive a comparatively generous supply of rain. Springs abound upon their flanks, and their upper slopes are clothed with a luxuriant herbage and with groves of timber. The smaller mountains and the foot-hills of the larger are less generously watered and but scantly clothed with vegetation. Their extent is small. From Ellen Peak to Mount Ellsworth, the two summits which are the most widely separated, the distance is but twenty-eight miles, and a circle, of eighteen miles radius will include the group.

"Mount Ellen which is the most northerly of the group, has an extreme altitude of 11,250 feet, and surpasses all its companions in horizontal extent, as well as altitude. Its crest-line is continuous for two miles, with an elevation varying little from 11,000 feet. From it there radiate spurs in all directions, descending to a series of foot-hills as conspicuous in their topography as they are interesting in their structure. In some places the base of the mountain is guarded by a continuous, steep ridge, through which a passage must be sought by the approach-

ing traveler, but within which, movement is comparatively unimpeded.

"Mount Pennell is a single peak rising to an altitude of 11,150 feet. On one side its slopes form those of Mount Ellen in Pennellen Pass (7,550 feet), and on the other those of Mount Hilliers in the Dinah Creek Pass (7,300 feet). Its profiles are simple, and it lacks the salient spurs that characterize Mount Ellen. From the west it is difficult of approach, being guarded by a barrier ridge continuous with that of Mount Ellen.

"Mount Hilliers is more rugged in its character, and although compact in its general form, is carved in deep gorges and massive spurs. Its rugosity is contrasted by the smoothness of its pedestal, which to the south and west and north is a sloping plain merging with the surrounding plateau.

"Mount Ellsworth (8,000) feet and Mount Holmes (7,750 feet) stand close together, but at a little distance from the others. The pass which separates them from Mount Hilliers has an altitude of 5,250 feet. They are single peaks, peculiarly rugged in their forms, and unwatered by springs. They stand almost upon the brink of the Colorado, which here flows through a canyon 1,500 feet in depth."

These mountains are formed in a manner almost peculiar to this region. There, eruptive or lava rocks, instead of reaching the surface and outflowing in broad streams, *intruded* themselves between the strata in great lens-shaped masses half a mile or more in diameter and several hundred feet thick. The beds of rock above them were "domed up," and are now seen curving over them. To these intrusive masses Gilbert gave the name "laccolites." The Sierras Carriso, Abajo, La Sal, La Plata, and El Late all were formed in this manner.

Not far away is the Dinosaur National Monument, where the fossils of great prehistoric animals have been

taken, hence the setting apart of the region as a National Monument.

On the way to Zion National Park the visitor sees the great walls of the Vermillion Cliffs. These may be followed from Steamboat Mountain, near Zion Canyon, northward to Rockville and Shunesburg, where it is cut by a canyon of the east fork of the Virgin River, and thence, southeast to Pipe Springs. At this point it is intersected by the same fault which deflected the Gray Cliff at Long Valley, and is itself carried northward a distance of three or four miles, when it resumes its easterly course, past the town of Kanab and Johnson's settlement, to Paria Creek, four miles above the town of Paria. Here it turns abruptly southward, and follows for forty miles the most easterly fault of the Kaibab Plateau. In the southern part of this course it is the East Wall of House Rock Valley, and it terminates that valley by turning sharply to the east. At Jacob's Pool it swings to the northeast and soon reaches the mouth of the Paria, where it crosses the Colorado river.

Dutton says of it:

"Thus far the distance is more than 120 miles, in which the sinuosities of the front are not reckoned. Throughout this entire sweep it presents to the southward a majestic wall richly sculptured and blazing with gorgeous colors. . . .

"To this great wall, terminating the Triassic terrace and stretching from the Hurricane Ledge to the Paria, Powell has given the name of the Vermillion Cliffs. Their great altitude, the remarkable length of their proportions are sustained throughout the entire interval, their ornate sculpture and rich coloring might justify very exalted language of description. But to the southward, just where the desert surface dips downward beneath the horizon, are those supreme walls of the Grand Canyon, which we must hereafter behold and vainly strive to

describe; and however worthy of admiration the Vermillion Cliffs may be, we must be frugal of adjectives, lest in the chapters to be written we find their force and meaning exhausted. They will be weak and vapid enough at best. Yet there are portions of the Vermillion Cliffs which in some respects lay hold of the sensibilities with a force not much less overwhelming than the majesty of the Grand Canyon; not in the same way, not by virtue of the same elements of power and impressiveness, but in a way of their own and by attributes of their own. In mass and grandeur and in the extent of their display there is no comparison; it would be like comparing a private gallery containing a few priceless treasures with the wealth of art in the Vatican or Louvre. All of the really superlative portions of the Vermillion Cliffs could be comfortably displayed in any one of half a dozen amphitheaters opening into the Kaibab division of the Grand Canyon. These portions occur in the beautiful valley of the Virgen, and they, as well as the features which characterize the entire front of the Vermillion Cliffs, merit some attempt at description.

"Each of the greater sedimentary groups of the terraces, from the Eocene to the Permian, inclusive, has its own style of sculpture and architecture; and it is at first surprising and always pleasing to observe how strongly the several styles contrast with each other. The elephantine structures of the Nile, the Grecian temples, the pagodas of China, the cathedrals of Western Europe, do not offer stronger contrasts than those we successively encounter as we descend the great stairway which leads down from the High Plateaus. As we pass from one terrace to another the scene is wholly changed; not only in the bolder and grander masses which dominate the landscape, but in every detail or accessory; in the tone of the color-masses, in the vegetation, and in the spirit and subjective influences of the scenery. Of these many and strong antithe-

ses, there is none stronger than that between the repose of the Jura and the animation of the Trias.

"The profile of the Vermillion Cliffs is very complex, though conforming to a definite type and made up of simple elements. Though it varies much in different localities it never loses its typical character. It consists of a series of vertical ledges rising tier above tier, story above story, with intervening slopes covered with talus through which the beds project their fretted edges. The stratification is always revealed with perfect distinctness and is even emphasized by the peculiar weathering. The beds are very numerous and mostly of small or moderate thickness, and the partings of the sandstones include layers of gypsum or gypsiferous sand and shale. The weathering attacks these gypseous layers with great effect, dissolving them to a considerable depth in the wall-face, producing a deeply engraved line between the including sandstones. This line is always in deep shadow and throws into strong relief the bright edges of the strata in the rock-face, separating them from each other with uncommon distinctness. Where the profiles are thrown well into view the vertical lines, which bound the faces of the ledges, are quite perpendicular and straight, while the lines of the intervening slopes are feebly concave, being, in fact, descending branches of hyperbolas. They are graceful in form and indeed genuine lines of beauty. The angles where the straight and curved lines meet, at the bases and summits of the ledges, are very keen and well cut. The composite effect thus given by the multiple cliffs and sloping water-tables rising story above story, by the acute definition of the profiles and horizontal moldings, and by the refined though inobtrusive details, is highly architectural and ornate, and contrasts in the extreme with the rough, craggy, beetling, aspect of the cliffs of other regions. This effect is much enhanced by the manner in which the wall advances in promontories or recedes in

alcoves, and by the wings and gables with sharp corners and Mansard roofs jutting out from every lateral face where there is the least danger of blankness or monotony."*

Bryce Canyon and Zion National Park are both in this same wonderful geological region and the reader is referred to the special chapters upon these glorious scenic wonders.

Reference already has been made to that well-known natural wonder, the Devil's Slide, seen on the main line of the Union Pacific in Weber Canyon. This is formed of two limestone reefs tilted up into a vertical position. The soft shale, between and outside the reefs has been eroded away, leaving them standing about forty feet above the general slope of the canyon side.

Though this chapter has expanded into far more than its allotted length, it has by no means exhausted the subject. If it has aroused the interest of the keen and intelligent student and given him a zest to pursue the subject further its object is already more than attained.

*Second Annual Report U. S. Geological Survey, pp. 83, 84, 85.

CHAPTER XI

THE OPALESCENT VALLEY — ZION NATIONAL PARK

Few citizens of the United States, east or west, realize how much they owe to that pioneer in scientific exploration, Major J. W. Powell, for the knowledge they possess of the wonders, glories, enchantments, that he found in the unknown regions of the west and made known to the world. Not the least of his discoveries was the marvelous canyon of the "Mukuntuweap," as the Indians called what is now "Zion National Park." Undoubtedly this opalescent valley was first seen and cursorily explored by the Mormons, possibly in the early fifties, though no one settled within its borders until the latter portion of the decade. A little later the Indians resented the assumptions of the new comers, and arose and drove them out, when it was again left to its native solitude for several years.

There have been three explanations offered as to the conferring of the name upon it of "Little Zion Canyon." One is that it came from Brigham Young. Salt Lake City was the new Zion to which the Mormons had been brought across the deserts, plains and mountains, in 1847. Ten years later, however, owing, to state it mildly, to misunderstandings between Brigham Young, as the Governor of Utah, and the federal government, President Buchanan sent an army to oust Brigham and install his successor. Brigham, however, with great force of argument, contended that this action of the President was in itself illegal and that, therefore, as the duly appointed

Governor, it was his duty to protect his people from the aggressions of unauthorized authority. The way he treated the troops is well known. Yet Brigham was a firm believer in preparedness, and, in order to be ready, should the soldiers gain access to Salt Lake City, he determined to find hiding places where the Mormons could flee and remain in perfect security so long as the troops remained.

It was at this time, it is said, that he was shown Mukuntuweap. He was so impressed with its seclusion, and its easily-defended inaccessibility, that he termed it the "Little Zion," to which he and his people would flee, should they find it necessary.

Another story is that he gave it the name because of the glorious towers, temples, tabernacles, domes, pinnacles, and minarets found there, and still a third story alleges that it was the settlers themselves who gave it the name.

Captain Dutton evidently thought it was Brigham Young who named it, for in his vivid language he declares:

"In its proportions it is about equal to Yosemite, but in the nobility and beauty of its sculptures there is no comparison. It is Hyperion to a satyr. No wonder the fierce Mormon zealot who named it was reminded of the Great Zion on which his fervid thoughts were bent, of houses not built with hands, eternal in the heavens."

And as we enter the canyon and become familiar with its sculptured walls we can well agree with another writer that it was:

"A happy chance that left the naming of the various sculptures in the canyon to the zealots of the Mormon Church, for none but the tremendous imagery of the Old Testament could do justice to these stupendous creations of nature. Thus we have the east and west Temples of the Virgin, the Altar of Sacrifice, the Great White

Throne, the Guardian Angels, the Gates of Zion, the Pass and Court of the Patriarchs; it is all sonorously inspiring and in keeping with the primeval grandeur of this land of majestic loveliness."

Undoubtedly the first account of Zion Canyon ever given to the world was that of Major Powell, in his *Explorations of the Colorado River*. On September 12, 1870, in company with Jacob Hamblin, the Mormon missionary, he visited it. He wrote:

"Our course, for the last two days, through Pa-ru-nu-weap Canyon, was directly to the west. Another stream comes down from the north and unites just here at Schunesberg with the main branch of the Rio Virgen. We determine to spend a day in the exploration of this stream. The Indians call the canyon, through which it runs, Mukoontuweap, or Straight Canyon. Entering this, we have to wade up stream; often the water fills the entire channel, and although we travel many miles, we find no flood-plain, talus, or broken piles of rock at the foot of the cliff. The walls have smooth, plain faces, and are everywhere very regular and vertical for a thousand feet or more, where they seem to break back in shelving slopes to higher altitudes; and everywhere, as we go along, we find springs bursting out at the foot of the walls, and passing these, the river above becomes steadily smaller; the great body of water which runs below, bursts out from beneath this great bed of red sandstone; as we go up the canyon, it comes to be but a creek and then a brook. On the western wall of the canyon stand some buttes, towers, and high pinnacled rocks. Going up the canyon we gain glimpses of them, here and there. Last summer, after our trip through the Canyon of the Colorado, on our way from the mouth of the Virgin to Salt Lake City, these were seen as conspicuous landmarks, from a distance, away to the southwest, of sixty or seventy miles.

These tower rocks are known as the Temples of the Virgin."

Powell invariably wrote with great restraint, and when it is recalled that his senses had been dazzled by his long and intimate intercourse with the stupendous majesty of the Grand Canyon, we can understand why his description of Mukuntuweap seems somewhat tame and commonplace. But that he was profoundly impressed, is revealed again and again in his writings, and when he sent the eminent poet-geologist, Clarence E. Dutton, to study and report on the geology of the Grand Canyon region, he at the same time, introduced him in this smaller, but equally dazzlingly gorgeous canyon. The result is that we have, in Dutton's description, one of the most vivid accounts yet written. And it must be remembered that these words were penned by one whose knowledge of other majestic canyon and plateau scenery, perhaps, was not surpassed by that of any other writer in the world. Let us read, then, with care and rigid attention what Captain Dutton writes:

"The controlling object was a great butte which sprang into view immediately before us, and which the salient of the wall had hitherto masked. Upon a pedestal two miles long and 1,000 feet high, rightly decorated with horizontal moldings, rose four towers highly suggestive of cathedral architecture. Their altitude above the plain was estimated at about 1,800 feet. They were separated by vertical clefts made by the enlargement of the joints, and many smaller clefts extending from the summits to the pedestal carved the turrets into tapering buttresses, which gave a graceful aspiring effect with a remarkable definiteness to the form. We named it Smithsonian Butte and it was decided that a sketch should be made of it; but in a few moments the plan was abandoned or forgotten. For, over a notch or saddle formed by a low isthmus which connected the butte with the principal mesa, there

sailed slowly and majestically into view, as we rode along, a wonderful object. Deeply moved, we paused a moment to contemplate it, and then, abandoning the trail, we rode rapidly towards the notch, beyond which it soon sank out of sight. In an hour's time we reached the crest of the isthmus, and in an instant there flashed before us a scene never to be forgotten. In coming time, it will, I believe, take rank with a very small number of spectacles each of which will, in its own way, be regarded as *the most exquisite of its kind which the world discloses.* The scene before us was the *Temples and Towers of the Virgin.*

"At our feet the surface drops down by cliff and talus 1,200 feet upon a broad and rugged plain cut by narrow canyons. The slopes, the winding ledges, the bosses of projecting rock, the naked, scanty soil, display colors which are truly amazing. Chocolate, maroon, purple, lavender, magenta, with broad bands of toned white, are laid in horizontal belts, strongly contrasting with each other, and the ever-varying slope of the surface cuts across them capriciously, so that the sharply defined belts wind about like the contours of a map. From right to left across the further foreground of the picture stretches the inner canyon of the Virgin, about 700 feet in depth, and here of considerable width. Its bottom is for the most part unseen, but in one place is disclosed by a turn in its course, showing the vivid green of vegetation. Across the canyon, and rather more than a mile and a half beyond it, stands the central and commanding object of the picture, the Western Temple, rising 4,000 feet above the river. Its glorious summit was the object we had seen an hour before, and now the matchless beauty and majesty of its vast mass is all before us. Yet it is only the central object of a mighty throng of structures wrought up to the same exalted style, and filling up the entire panorama. Right opposite us are the two principal forks of the Virgin, the Parunuweap coming from the right or east, and the

Mukuntuweap, or Zion Valley, descending towards us from the north. The Parunuweap is seen emerging on the extreme right through a stupendous gateway and chasm in the Triassic terrace, nearly 3,000 feet in depth. The further wall of this canyon, at the opening of the gateway, quickly swings northward at a right angle and becomes the eastern wall of Zion Valley. As it sweeps down the Parunuweap it breaks into great pediments covered all over with the richest carvings. The effect is much like that which the architect of the Milan Cathedral appears to have designed, though here it is vividly suggested rather than fully realized — as an artist painting in the 'broad style' suggests many things without actually drawing them. The sumptuous, bewildering, mazy effect is all there, but when we attempt to analyze it in detail it eludes us. The flank of the wall receding up the Mukuntuweap is for a mile or two similarly decorated, but it soon breaks into new forms much more impressive and wonderful. A row of towers half a mile high is quarried out of the palisade and stands well advanced from its face. There is an eloquence to their forms which stirs the imagination with a singular power, and kindles in the mind of the dullest observer a glowing response. Just behind them, rising a thousand feet higher, is the Eastern Temple, crowned with a cylindrical dome of white sandstone; but since it is, in many respects, a repetition of the Western Temple, we may turn our attention to the latter. Directly in front of us a complex group of white towers, springing from a central pile, mounts upwards to the clouds. Out of their midst, and high over all, rises a dome-like mass, which dominates the entire landscape. It is almost pure white, with brilliant streaks of carmine descending its vertical walls. At the summit it is truncated, and a flat tablet is laid upon the top, showing its edges of deep red. It is impossible to liken this object to any familiar shape, for it resembles

none. Yet its shape is far from being indefinite; on the contrary, it has a definiteness and individuality which extort an exclamation of surprise when first beheld.

"There is no name provided for such an object, nor is it worth while to invent one. Call it a dome; not because it has the ordinary shape of such a structure, but because it performs the functions of a dome.

"The towers which surround it are of inferior mass and altitude, but each of them is a study of fine form and architectural effect. They are white above, and change to a strong, rich red below. Dome and towers are planted upon a substructure no less admirable. Its plan is indefinite, but its profiles are perfectly systematic. A curtain wall, 1,400 feet high, descends vertically from the eaves of the temples and is succeeded by a steep slope of ever-widening base courses leading down to the esplanade below. The curtain wall is decorated with a lavish display of vertical moldings, and the ridges, eaves, and mitered angles are fretted with serrated cusps. This ornamentation is suggestive rather than precise, but it is none the less effective. It is repetitive, not symmetrical. But though exact symmetry is wanting, Nature has here brought home to us the truth that symmetry is only one of an infinite range of devices by which beauty can be materialized.

"'And finer forms are in the quarry
Than ever Angelo evoked.'"

Let a more modern writer, Robert Sterling Yard, now take up the theme and describe the East Temple:

"The East Temple, which rises directly opposite and two miles back from the rim, is a fitting companion. It is a thousand feet higher. Its central structure is a steep truncated cone capped like the West Temple. Its wings are separated half-way down, one an elongated pyramid and the other a true cone, both of magnificent size and

bulk but truly proportioned to the central mass. Phrase does not convey the suggestion or architectural calculation in both of these stupendous monuments. . . . .

"A more definite conception of Nature's gigantic processes follows upon realization that these lofty structures once joined across the canyon, stratum for stratum, color for color. The rock that joined them, disintegrated by the frosts and rains, has passed down the muddy current of the Virgin, down the surging tide of the Colorado, through the Grand Canyon, and into the Pacific. Some part of these sands doubtless helped to build the peninsula of Lower California."

Now a few words from Dutton upon this Eastern Temple:

"Reverting to the twin temple across Zion Valley, its upper mass is a repetition of the one which crowns the western pile. It has the same elliptical contour, and a similar red tablet above. In its effect upon the imagination it is much the same. But from the point from which we first viewed them — and it is by far the best one accessible — it was too distant to be seen to the fullest advantage, and the Western Temple by its greater proximity overpowered its neighbor."

The present day visitor to Zion Canyon, however, must note that his position is practically the reverse of that occupied by Captain Dutton when he wrote these memorable descriptions. The new road takes one close to the Eastern Temple, and the Western one, therefore, though the more majestic and awe-inspiring, is seen far away to the right, and is dwarfed somewhat by its distance. Dutton continues:

"Nothing can exceed the wondrous beauty of Zion Valley, which separates the two temples and their respective groups of towers. Nor are these the only sublime structures which look down into its depths, for similar

ones are seen on either hand along its receding vista until a turn in the course carries the valley out of sight."

Yard thus describes the ravine:

"Passing the gates the traveler stands in a trench of nearly perpendicular sides more than half a mile deep, half a mile wide at the bottom, a mile wide from crest to crest. The proportions and measurements suggest Yosemite, but there is little else in common. These walls blaze with color. On the west the Streaked Wall, carved from the White Cliff, is stained with the drip from the red and drab and chocolate shales and limestones not yet wholly washed from its top. It is a vivid thing, wonderfully eroded. Opposite is the Brown Wall, rich in hue, supporting three stupendous structures of gorgeous color, two of which are known as the Mountain of the Sun and the Watchman. Together they are the Sentinels. Passing these across a plaza apparently broadened for their better presentation, rise on the west the Three Patriarchs, Yosemite-like in form, height, and bulk, but not in personality or color. The brilliance of this wonder-spot passes description."

As Yard has suggested, in some respects, Zion Canyon is like Yosemite, in size and the abruptness of its cliffs. Its walls are not as high as those of Yosemite, though to the general eye they appear to be so, but instead of the dull gray of the Yosemite's granite here are mauves, purples, olive-greens, deep chocolate reds, and creamy whites. It is a genuine opal or rainbow land, resplendent in color, with walls of dazzling splendor, crowned with peaks and domes, minarets and towers, carved into startling, grotesque, beautiful, enchanting shapes by the never-tiring forces of Nature.

While the approach to Zion is strikingly grand, it is altogether unlike that of Yosemite, where the Canyon of the Merced gives one a full foretaste of what is ahead. Here, the approach is more open, though there are sug-

gestions and foretastes enough to satisfy the most exacting. To the left, as one rides up the dugway recently constructed on the hill-side by the National Park Service, he sees two white towers, dazzingly brilliant in the sunshine, but these are dwarfed in comparison with the Great Temple of the Virgin, which for hours and hours of swiftest travel has lifted its opalescent shoulders alluringly against the eastern sky. As we approach we are in the midst of incredible cliffs, buttes, pinnacles, all radiant in glowing color, all strikingly sculptured, yet altogether insignificant in the presence of that masterpiece across the river, — the Great Temple. Writes F. S. Dellenbaugh:

"Under the noonday sun it glows with an iridescence that intensifies its magnitude. The delicacy of the merging tints of red and white and yellowy cream, with tones of soft vermillion spread here and there athwart the white like alpenglow transfixed, is discouraging enough to the brush of the painter. The foreground is gravelly desert sprinkled with the exquisite gray-green of the sage-brush, inhabited, apparently, only by lizards, one large, active specimen resenting our intrusion by a series of angry hisses.* Away below, sage-covered slopes extend to the distant green of Virgin City, overshadowed by the towering magnificence of the Great Temple, standing unique, sublime, adamantine. One hardly knows just what to think of it. Never before has such a naked mountain of rock entered into our minds! Without a shred of disguise its transcendent form rises preëminent. There is almost nothing to compare to it — Niagara has the beauty of energy; the Grand Canyon, of immensity; the Yellowstone, of singularity; the Yosemite, of altitude; the ocean, of power; this Great Temple, of eternity. —

"'The Titan-fronted, blowy steeps
That cradled Time.'

*Here, apparently, Dr. Dellenbaugh refers to the Gila monster, which, personally I never have seen north of the Grand Canyon. I am told, however, that occasionally it is found in southern Utah. It should be noted, also, that his "Great Temple" is undoubtedly the "Western Temple" of Capt. Dutton.

"One feels here in sympathy with Childe Roland halting before the Dark Tower, yet is uncertain whether, like him, to blow a blast of defiance or, like Moslem at Mecca, to fall in prayerful homage.

"Indeed, we are at last face to face with the Unobtainable; no foot of man has ever touched the summit of this silent shrine, 7,500 feet above the level of the sea, 4,000 above the valley before us. Storm, night, the stars, the sun and moon, the elements, alone hold communion with that pristine crest. Under its shadow we may almost touch the latch-string of Eternity; almost see ourselves in the dull mirror of Time. There comes a feeling that it ought to speak, to roar, to belch forth fire and brimstone, to give some sign of the throes of world-birth it has witnessed since these rocks were dyed in the antediluvian seas. But only the silence of the outer spheres encircles it; in all that wondrous expanse of magnificent precipices we hear no sound save our own voices and the whisper of the wind that comes and goes, breathing with the round of centuries.

"In the morning we discover that the great butte, like a chameleon, has changed color. The rare opalescence has vanished; instead, the rock mountain palpitates with a heavenly blue, as if metamorphosed to sapphire in a night. But the sun, mounting, darts shafts of light across the summit, the outlying pinnacles are set aflame; gradually the whole array of colors burns out again with all the intensity of yesterday. To the left the white and red rock domes of Colob Plateau stand luminous also, the color everywhere increasing in brilliancy as the sun falls, till the entire landscape appears kaleidoscopic, yet never harsh nor crude. To eyes prejudiced by the soft blues and grays of a familiar eastern United States or European district, this immense prodigality of color is startling, perhaps painful; it seems to the inflexible mind unwarranted, immodest, as

if Nature had stripped and posed nude, unblushing before humanity."

That is a poetic description made by an artist with a mind alert to native beauty and a soul awake to high and noble sentiment.

The traveler to Zion should also note well Captain Dutton's description of the two forks of the Virgin River. The one to the left — facing the canyon — is the Mukuntuweap, or the north fork, — Zion City itself — while the one to the right is the Parunuweap, or the south fork. The former drains the larger area and though most of the travelers who visited Zion Canyon in the past few summers have seen only a quiet mountain stream meandering along, the few inhabitants of the region know that occasionally it becomes a raging torrent, booming and slashing at the sides of the canyon with cutting force, and carrying away all the loose sand and rock-debris that have accumulated as talus at the foot of the cliffs since the last flood. Undoubtedly these floods have been the principal carving agencies in the making of these great canyons, for Parunuweap is a wonderful canyon as well as is Mukuntuweap, though nothing like so varied in its architectural forms.

The western gate-post of Zion is magnificent as one enters the canyon, and, says Dellenbaugh:

"The Great Temple is the forerunner of numerous other temples, some of them reaching up close to the altitude of its own mighty head. With the Great Temple on the one hand, looming 4,000 feet, and on the other one of more than 2,000 feet, the spectator is instantly enveloped in the maze of cliffs and color, a double line of majestic sculptures, — domes, pyramids, pinnacles, temples, sweeping away to the north, dazzling with vermillion, orange, pink, and white, — all scintillating in the burning sunlight with an intensity not comprehensible to those who have never had the good fortune to breathe this lambent

air amidst the overwhelming profusion of color. And the splendor of all this exquisite Nature-painting is enhanced by the soft green of the cultivated fields and foliage of Springdale, the last settlement (in the mouth of the canyon). The white summits of carved stone shine and shimmer like snow mantles against the sky, whose enchanting blue, flecked here and there by a drifting cloud, repeats on high the azure of the shadows, and gives the finishing touch to the panorama — to the opalescence of the valley. Yet with all the wonderful play of color there is nothing garish or bizarre about this Opalescent Valley; sky and cliff and bottomland are blended harmoniously into one picture.

" The Great Temple as it is approached from the west, at first appears ominous, forbidding, and we might expect the valley which it guards to offer a similar impression; but now the Temple from this point seems quite indifferent, in its attitude, while the Opalescent Valley itself opens wide and smiling, seductive as the realm of some sleeping beauty."

When Dellenbaugh went up the canyon in 1903, there were houses and cultivated fields in what is now the National Park. The people of Springdale had cut a rude wagon-road on the hills which made the further ascent from their village possible. The park officials have now constructed a good automobile road, though it is not one to be careless upon. The fields have been allowed to revert to their natural condition, and the present-day visitor occasionally is surprised to find himself standing under a well-laden apple tree, growing, apparently, as wild as the sage-brush and cactus.

Dellenbaugh's descriptions are fascinating, though it must be recalled, in reading them, that, since his day, all the principal features of the canyon have received specific names; he says:

" Two miles above the village we passed several houses,

the final ones in this direction; henceforth we had the entire valley to ourselves; henceforth these mighty towers and temples reared their stupendous fronts for us alone; for us the river sent up its angry growl as if resenting our intrusion within this realm fit only for the Titan gods. Nearer came the domes and precipices, perpendicular for twice a thousand feet; closer came the great boulders and bluffs by the river, till we were creeping along a roadway hewn out of the low hills by the Springdale people, who utilize some of the lands above. Without this no wagon could go farther. For a couple of miles the bottom is forbidding, the river roaring at our feet, the precipices leaping to the sky. Ahead are vistas of even greater pyramids with foreground of beating waters. These seem, indeed, to be balanced in the zenith. They are extraordinary, and though they have not the base-bulk of the Great Temple, they astound us by their beetling, towering character as much as did that giant butte. Words fail to express the sensations inspired by these excessive heights of naked rock. The river constantly forms an appropriate foreground, and at length as we near the upper end of this particular division one of the most complete pictures of the whole valley unfolds before us. In the foreground are the chaotic masses of red rock through which the river tears its way; green cottonwoods and bushes then inject their note, leading on to a huge vermillion pyramid whose precipices cleave the sky in the May-day sun like a battle-axe, behind and above it rising the still, white rocks of the yet greater pyramids."

There are really four distinct divisions of Zion Canyon, the remembrance of which may be helpful to the tourist desirous of carrying away as perfect and complete impressions as is possible. These canyon phases are:

1. The approach, from whence the closer views of the rear of the Great Temple, and the Guardian Angels are obtained.

2. The entrance into the canyon, or the ravine.

3. The amphitheater, which extends to the turn where the cable, or "wire," is located.

4. The narrowing canyon leading into the closed chasm.

The approach, of which masters of description have already fully apprized us, is thus graphically presented in our day by Robert Sterling Yard, in his *Book of the National Parks:*

"From here on, swinging easterly up-stream, sensation hastens to its climax. Here the Hurricane Cliff sends aloft an impressive butte painted in slanting colors and capped with basalt. Farther on a rugged promontory striped with vivid tints pushes out from the southern wall nearly to the river's brink. The cliffs on both sides of the river are carved from the stratum which geologists call the Belted Shales. Greenish-grays, brownish-yellows, many shades of bright red, are prominent; it is hard to name a color or shade which is not represented in its horizontal bands. 'The eye tires and the mind flags in their presence,' writes Professor Willis T. Lee. 'To try to realize in an hour's time the beauty and variety of detail here presented is as useless as to try to grasp the thoughts expressed in whole rows of volumes by walking through a library.'

"Far up the canyon which North Creek pushes through this banded cliff, two towering cones of glistening white are well named Guardian Angels — of the stream which roars between their feet. Eagle Crag, which Moran painted, looms into view. On the south appears the majestic massing of needle-pointed towers which Powell named the Pinnacles of the Virgin. The spectacular confuses with its brilliant variations.

"Reaching Springdale, at the base of the Vermillion Cliff, the traveler looks up-stream to the valley mouth through which the river emerges from the cliffs, and a

spectacle without parallel meets his eye. Left of the gorgeous entrance rises the unbelievable West Temple of the Virgin, and, merging with it from behind, loom the lofty Towers of the Virgin. Opposite these, and back from the canyon's eastern brink, rises the loftier and even more majestic East Temple of the Virgin. Between them he sees a perspective of red and white walls, domes, and pinnacles which thrills him with expectation.

"And so, fully prepared in mind and in spirit, awed and exultant, he enters Zion."

Let Dellenbaugh now describe the amphitheater as he saw it:

"Coming out of the head of the great ravine into the amphitheater as upon the floor of another story, the magnificent series of pyramids on the left disclose their full majesty; the little river no longer frets amidst boulders, but glides with a concentrated intensity. To the west opens a deep alcove, aiding to form this huge amphitheater. There are thick groves of cottonwoods in the wide, level bottoms; on the slopes of talus, cacti bloom gorgeously; there also are manzanita with its rich red stem and waxen leaf, sage-brush, and many other plants, cedars and pinyons. The blue sky above again touches the right chord in the symphony. Up and down, east and west, extends the labrynthian array of giant rock-forms so magnificently sculptured, so ravishingly tinted. Again we are impressed with the marvelous beauty of outline, as well as the infinite complication of these Titanic buttes. It is doubtful if in this respect the valley has anywhere its equal. Not even the best part of the Grand Canyon offers a more varied spectacle. There is an isolation of each temple here that is rare, yet all are welded together in a superb ensemble.

"A little farther on a particularly separated, enormous composition of naked rock — naked like all the others, except for a scattering of pine trees on the extreme sum-

mits or along some precarious ledge — shot up on the left in the semblance of some Cyclopean organ, its flutings brought out by the waning sun — the Temple of Aeolus."

In the amphitheater, in a shady alcove of the east wall near a spring, which gives a wonderful flow of cold, pure water, Mr. and Mrs. W. W. Wylie, of Yellowstone Park fame, established in 1917, their hotel camp. To those who know Wylie's camps nothing further need be said, and others may safely and satisfactorily take them on trust, for many thousands, in the years they were in the Yellowstone, learned of the "Wylie Way," and have ever since been enthusiastic boosters for its directing spirits. While only a camp, the cottages are cosy and comfortable, the dining room attractive, and Mrs. Wylie's genuine and motherly interest, combined with the excellent home-cooking that she supervises, at once gives to everyone that restful home-feeling that is so desirable when one is traveling.*

Sunrises and sunsets alike here attract the observant visitor. Dellenbaugh was enraptured:

"Never could the valley appear more resplendent than on that beautiful day as the sun streamed out of the west, sweeping the flanks of the precipices with a ruddy brilliance that intensified the gorgeous hues tenfold, while the shadow portions grew more somber, fading at a distance into a rich cerulean bloom, broken by the dark green of cottonwood groves. Surely it was a setting for a fairy tale!"

And after a long night's rest, calming alike to mind and body, while rain poured down gently over the rocks, he was equally thrilled with the effects of the dawn:

"When dawn crept shyly in, the opalescence was veiled by low-drifting clouds. The vast surfaces of bare rock

*It should also be observed that Mr. Wylie has made it possible for travelers to Zion Canyon to return by way of the Grand Canyon of Arizona. He has established a camp on the north rim of the Grand Canyon, opposite El Tovar Hotel, and the trip across the Canyon to the Santa Fe railway can be made with safety.

had been soaked through the night, and now we saw shining cascades, quivering and feathery, dropping down from that upper world. These rain-cascades may be seen throughout the wondrous cliff-land of the Southwest, but those of Mukuntuweap, and some I saw in the canyons of the Colorado, are the highest and most graceful that I remember."

El Gobernador, so called by Yard in his book, and more generally known as "The Great White Throne," is about a mile above Wylie's camp and on the right hand side. It is a colossal truncated cone, 3,000 feet high, the lower 2,000 feet of which is a brilliant red, and the upper thousand a dazzling white in the clear sunlight. This is the one object chosen by W. H. Bull, the world-famed California artist, as the gem — his chief delight, — in Zion Canyon. His masterly portrayal of it has given great delight to many thousands.

Almost directly opposite, but standing out somewhat from the main wall on the left, as a buttress, is a lesser monolith, though gigantic and impressive, known as the Angel's Landing. This is the subject chosen by Orion Putnam, of Los Angeles, — whose artistic photography has made him world-famous, and whose brush is now sure to win him later laurels, — as most representative of Zion National Park.

This varied choice of subjects by different artists is wonderfully illuminative, in that it shows how many-sided is this canyon in its appeal to artistic natures. There is variety enough to demand the homage of the most diverse tastes, hence the universality of Zion's appeal.

A mile or so farther up the canyon and Raspberry Bend is reached. Here is located the cable, or "wire," which every visitor is interested in seeing.

Dellenbaugh thus gives its history:

"The frequent mention of this wire in conversation made us curious to know about it. A wire was a strange

thing to receive so much attention. Inquiry revealed that it was about seven miles further up the valley (canyon), the result of the cogitations of a Springdale genius and quite an engineering feat in its way. A trail had been built at the point mentioned up the cliff to the Colob Plateau, for the purpose of enabling the Springdale people to drive cattle for the summer to the heights where there is good grazing. Immediately to the right of this trail is a well nigh vertical cliff, about 3,000 feet up from its base. On the top of this cliff, on the very brink, young Flanagan constructed a windlass. Down below he built two others a distance apart, around the three he succeeded in passing a series of wires forming a continuous cable. By revolving one of the drums the wire travels up and down, and objects attached to the descending portion come down into the canyon, while objects attached to the other portion are made to ascend to the rim. By this means supplies are sent up to men staying on the plateau, and various objects are passed both ways. On one occasion a wagon was taken up in parts; on another a dog was treated to the aerial flight, tied in a basket. It was a week before the dog recovered fully, and since that time the vicinity of the wire is a place he never visits."

There is a trail just to the left of the cable, once used by the Indians in their sure-footed, clear-eyed, strong-lunged, perfect heart-actioned days. It is related that one of the last Indians to attempt it slipped and was dashed to pieces on the rocks below. If so, he was a partially cilivized (please note the spelling and pronunciation) Indian, and was filled with "Valley-tan" or some other equally demoralizing brand, or he was an old-timer, wearied with the hideous inconsistencies of white men, and in a hurry to get to his fathers. This is the trail referred to by Dellenbaugh. In time it will doubtless be made accessible to the ambitious tourist, but at present, unless he is daring, and an expert rider, it is better to take it on foot. Of

course I am well aware that many modern tourists will take a glance at the cliff, and will turn away with disgust, assured that it is not possible to build a trail in such a precipitous place.

Making the curve, away from the cable, one finds the Great Organ. It requires little imagination to see the fluted pipes and immense consol, and when the winds blow down the canyon real music is produced as they hurry through the cracks, crevices and holes that Nature has provided.

Now let Dellenbaugh take us up to the Narrows:

"The valley so rapidly narrows above the wire that it is properly a canyon. The walls shoot up sheer, after a talus of about 100 feet, and are from 2,000 to 2,500 feet in height, with occasional towers of the white sandstone still higher, seen through breaks in the red-wall bends. The color is deep red at bottom, with black streaks, merging into grayish white or whitish gray at the top. Every few hundred yards we forded the swift little river, the current sometimes making the horses feel rather wobbly under one as they slid across the stony bottom. Around one bend we saw, through a break in the cliff, into an alcove formed by the bend above, where a splendid fall five or six feet wide fell at least 800 feet, swaying in the wind. Ever narrower grew the canyon as we advanced, the vertical cliffs constantly approaching, till one felt like the prisoner of Tolfi, 'in that rock-encircled dungeon which stood alone, and whose portals never opened twice upon a living captive.' The bottom was comparatively level, and at the wire about 800 feet wide. This width fell to about forty feet at the point we finally reached, where farther advance was next to impossible at the stage of water prevailing. Finally, by plunging once more across the stream, now more concentrated, and back again to the east bank, I succeeded in dragging my horses along talus and through underbrush till I looked straight into the jaws

of the narrowing chasm through which the river enters the valley."

Dr. G. K. Gilbert, who early made a geological study of Mukuntuweap, thus describes this part of Zion, and gives the scientific explanation of the canyon's existence:

"At the water's edge the walls are perpendicular, but in the deeper parts they open out toward the top. As we entered and found our outlook of sky contracted — as we had never before seen it between canyon cliffs — I measured the aperture above, and found it thirty-five degrees. We had thought this a minimum, but soon discovered our error. Nearer and nearer the walls approached and our strip of blue narrowed down to twenty degrees, then ten, and at last was even intercepted by the overhanging rocks. There was, perhaps, no point from which, neither forward nor backward, could we discover a patch of sky, but many times our upward view was completely cut off by the interlocking of the walls, which remaining nearly parallel to each other, warped in and out as they ascended."

Then he tells us how Nature made Zion and the other similar canyons of the region:

"As a monument of denudation, this chasm is an example of downward erosion by sand-bearing water. The principle on which the cutting depends is almost identical with that of the marble saw, but the sand grains, instead of being embedded in rigid iron, are carried by a flexible stream of water. By gravity they have been held against the bottom of the cut, so that they should make it vertical, but the current has carried them, in places, against one side or the other, and so far modified the influence of gravity that the cut undulates somewhat in its vertical section, as well as in its horizontal."

Yard then eloquently concludes:

"This, then, is how Nature began, on the original surface of the plateau, perhaps with the output of a spring

shower, to dig this whole mighty spectacle for our enjoyment today. We may go further. We may imagine the beginning of the titanic process that dug the millions of millions of chasms, big and little, contributing to the mighty Colorado, that dug the Grand Canyon itself, that reduced to the glorified thing it now is the enormous plateau of our great southwest, which would have been many thousands of feet higher than the highest pinnacle of Zion had not erosion more than counteracted the uplifting of the plateau."

There is a little confusion in the minds of some people as to the spelling of the name, "Virgin" or "Virgen" River. There need be no difficulty. The name originally was bestowed by the Spaniards. It was the *Rio Virgen* — the Spanish form. When one writes thus it should be spelled as the Spaniards spell, with an "e." But if one Anglicizes it and makes of it the Virgin River, it is correct to spell it with an "i."

Zion Canyon makes such an impression upon its visitors that they are not content merely with describing the wonders within its confines. The fact is, the whole country surrounding it is vividly wonderful in so many phases that even with its glories just "in one's eye" he is profoundly impressed as he observes it in leaving Zion. Many scientific and artistic visitors have written their impressions, but I know of none that equal those of Dellenbaugh and Dutton, both of which are here given as a fitting end to this chapter. Here is what Dellenbaugh says:

"All too soon we passed beyond its giant gates, swinging around the southern foot of the Great Temple, and arrived at Rockville, where, for the last time we forded the river. With the help of an extra team, our wagon was towed up the long 'dugway' surmounting the thousand feet of precipice that bind the valley immediately on the south, and on top of which our path lay off into

Arizona, across broad plains. Mounting, ever mounting, the valley, the fields, diminish below; cliffs that seemed great melt away; others keep us company in their stead; while still others tower to touch the sky, with everywhere and always the Great Temple the chief note in the scale. At last we were on the top, amidst a bewilderingly magnificent scene. The whole marvelous landscape circled around us now in one immense sweep, weird and wild to the last degree, with apparently no human life but ours within the vast radius of our vision. Mountain, canyon, cliff, pinnacle, valley, and temple stood forth, naked as in those first hours when lifted out of the enveloping seas; (but sculptured since then into the glorious variety of form now presented) a wonderful, an appalling wilderness, of which Zion, the *Opalescent Valley,* is the heart and culmination. For hours, as we traveled, this all pervading panorama, so varied and stupendous in outline and color, threw its enchantment around us. Then nearer high cliffs veiled the Great Temple, its sky-swept crown of vermillion vanished, and with it all the kaleidoscopic region of Zion."

Dutton thus describes this outward view from the mouth of Zion:

"From these highly wrought groups in the center of the picture the eye escapes to the westward along a mass of cliffs and buttes covered with the same profusion of decoration as the walls of the temples and of the Parunuweap. Their color is brilliant red. Much imagination is imparted to this part of the scene by the wandering courses of the mural fronts which have little continuity and not definite trend. The Triassic terrace out of which they have been carved is cut into by broad amphitheaters and slashed in all directions by wide canyon valleys. The resulting escarpments stretch their courses in every direction, here fronting toward us, there averted; now receding

behind a nearer mass, and again emerging from an unseen alcove. Far to the westward, twenty miles away, is seen the last palisade lifting its imposing front behind a mass of towers and domes to an altitude of probably near 3,000 feet and with a grandeur which the distance cannot dispel. Beyond it the scenery changes almost instantly, for it passes at once into the Great Basin, which, to this region, is as another world."

CHAPTER XII

BRYCE CANYON, AN AMPHITHEATER OF EROSION

A few miles from Panguitch, at the head of a wide and deep canyon, is found this remarkable amphitheater of erosion as yet known only by the undescriptive cognomen of Bryce Canyon. Like the Grand Canyon one reaches it unexpectedly so that its magnificent and brilliantly colored panorama is revealed as a great surprise. Acres and acres of ground here seem to be formed of a soft material, highly colored but mainly red, into which the rains and storms of past centuries have cut down and down, until there are left standing, literally, hundreds, possibly thousands, of columns, twisted towers, weird turrets, scores, hundreds of feet deep. Talk about fantasy and bewilderment — they are here personified. One could easily disbelieve his own eyes. As one has described it:

"Here are over three square miles of highly colored and quaintly carved obelisks, pilasters, pillars, towers, kiosks, and other features in great variety, with colors of the rarest combination and delicacies because of the varying reflection, absorption and transmission of the light by native brown, ochre, pink and gray masses in a varying illumination of bronze, orange, yellow, white, rose and red, spread across the chameleon-like abyss, lending unusual life to the geological forms."

It is entirely caused by simple erosive forces. The rock stratum of which these forms are composed is of very soft material. Resting upon it, however, in the ages long gone by was a harder stratum which capped this

softer one. There were places, however, in this cap, which, in time, succumbed to rain, frost, snow, and split, thus enabling water to penetrate and begin its work of washing down and away the stratum beneath. Some of these pillars are fifty, sixty and even eighty feet in height, yet trails have been cut down from the rim to the bottom of the canyon, so that one may descend and view these unique structures from below. It is an experience never to be forgotten, for everything is so near that its dimensions are magnified and one feels he really is wandering in some tunneled land of rare enchantment.

CHAPTER XIII

MODERN IRRIGATION AND THE MORMONS

In my *Reclaiming the Arid West,** I sought to give to Major John Wesley Powell, — the organizing genius of the United States Bureau of Ethnology, of the United States Geological Survey, and, in all of its earlier stages, of the United States Reclamation Service, — the honor due him as the Father of Federal Irrigation Methods on a large scale.

But I did not there seek to trace out those influences that had interested him in the subject, and given him the vision. That many influences worked to produce the result there can be no doubt. Powell was a man of gigantic intellect, a great reader, a close observer, and habituated to meeting men of science, travel, refinement and culture. From his general reading, no doubt, he had gained knowledge of the wonders of irrigation in the arid lands of the Orient. Then, when, in his geological studies he decided to explore the canyons of the Colorado River, he was brought into immediate contact with the arid lands of Colorado, Wyoming, Arizona, New Mexico and Utah. It was in 1869-1870-1-2, that he made his two memorable trips down the Colorado and its tributaries. On one of those trips he left the Colorado at Kanab Wash and came out through the settlements of southern and central Utah to Salt Lake City, there to return East.

The importance of this trip through the Mormon settle-

**Reclaiming the Arid West:* the work of the U. S. Reclamation Service, with many illustrations. Dodd, Mead & Co.

ments, where he saw irrigation methods in active operation upon thousands of acres, cannot be over estimated. Perhaps no one can ever know for certain, but is it not highly probable that it was on this trip he gained that wonderful vision that ultimately led to the organization of the United States Reclamation Service, and the improvement of the lives of hundreds of thousands of American citizens by making their location upon irrigated public lands a reality. Anyhow the fact is plain that from that date he began his studies of the Arid Region, and to formulate plans for their reclamation. These studies ultimated in the publication, in 1878, of his *Report on the Lands of the Arid Region.* As I wrote in *Reclaiming the Arid West,* page 2:

"No one can read this today, over forty years after it was published, without being profoundly impressed by the far-seeing wisdom and sagacity of its author. In it he shows two great advantages of irrigation, viz.: 1. That crops thus cultivated are not subject to the vicissitudes of rainfall, and 2. The water for irrigation generally comes down from the mountains and plateaus freighted or charged with fertilizing materials gathered from the decaying vegetable matter and soil of the higher regions."

Viewing all these facts in the order thus presented it seems to me self evident that Powell largely owed this inspiration upon irrigation to the untutored Mormons, those daring and brave men who had fled the East and Europe and had settled in the hitherto unknown valleys of Utah, for it was in 1847, July 24, that Brigham Young and the pioneer band of Mormons entered Salt Lake Valley. In spite of the fact that, the day before, when he looked down from the Wasatch ramparts on the east, he had gazed upon an arid waste, barren and uninviting, a desert of sage-brush and sunflowers, without a tree to cheer excepting only the few gnarled cottonwoods that

marked the trickling course of the mountain streams, he had exclaimed with all the assurance of a Prophet: "This is the Place." Had he seen it in a dream? Had it been a definite revelation from God? Was it the snap decision of the moment, afterwards confirmed by Nature, and arduous labor? Let the answers be what they may, there is no denying the fact of history, viz., that that momentous decision revealed the highest wisdom — the intuitive perception of what no one could possibly have known by any earthly knowledge of experience or comparison.

Assured that he was divinely guided Brigham Young sent ahead a small detachment of his followers with instructions to plow and plant immediately. The year was far advanced, near the end of July — and there must be no delay if any crop was to be garnered before winter, yet, though the most promising site was selected, the sun-baked soil was too hard to yield to the persuasive influence of the plow. To many this would have been an omen of disaster; Nature refusing to yield a foot of this virgin soil to the invader. But to these stalwart Mormons it had the very opposite effect. Obstacles, difficulties, rebuffs were but given to try their mettle, to determine the quality of their manhood, and, before the day was over, the beginning of a dam had been made across the little stream, and the following day saw the area selected flooded and softening under the benign influences of water and sun. This work accomplished, the field was plowed and potatoes, corn, and other edibles planted, after which the ground was given another irrigation, and later, still another, as the conditions indicated the need, and thus, *in Utah, modern irrigation began.*

Whence gained Brigham Young and his followers their knowledge of this essential method for making the desert blossom as a rose? Was he a deep student of history, a great traveler, and familiar with irrigation methods of India, China, Persia, Egypt and Asia Minor? His was

that type of mind that, given an idea, he could grasp its import instantly, he could see possibilities and probabilities eventuate in his mind's eye, and this power combined with what might be termed the colossal audacity of a tremendous and gripping faith in God the Almighty, gave to Brigham Young a power of command and leadership in this matter of irrigation that few, even among the most studious of Mormons have fully recognized.

For, as soon as the first establishment near the Great Salt Lake was made, he sent out various bands, in various directions, to spy out the land. These men were commanded to treat the Indians with kindness, for did not the Book of Mormon reveal that they constitute a distinct branch of the House of Israel? They were required also to find all arable areas, and discover everything that a speedy survey could reveal of all streams, springs and other sources of water supply.

As these bands reported, Mormon immigrants were pouring into Salt Lake City, and, making the swift decisions of a born leader of men, Brigham Young allotted certain lands and streams to certain companies, and, almost before they had rested and recuperated from their arduous labor in crossing the plains, sent them forth to possess and cultivate them and establish their homes thereupon.

See the sublime faith of these people in their leader. Impostor, his enemies may choose to regard him, but he was able to infuse his followers with unquenchable enthusiasm, — for only such a spirit could have led these people gathered from the cities and towns of the East and Europe, as well as from the villages, to go forth into the *Deserts,* and there plow and harrow the ground, sow the seed, and then use the untried and unknown methods of irrigation, to make their crops grow. In this way Jordan River Valley, Ogden, Provo, all the region of the Utah Lake Drainage System, Spanish Fork River Valley, the Weber Valley, the Basin of the Virgin River, the Valley

of Sevier River, and the Logan River country, were settled. Towns, cities and villages rapidly sprang up, as the farms were developed, and as cattle, horses, mules and sheep roamed the hills and canyons. It goes without saying there were hard times in those early days, yet it is notable that the pioneers seldom, if ever, lost their faith or their courage, and the persistence of their labor ultimately gained for them the victory of great success.

The year 1848 was one of deep trial and faith-testing of those immigrants who settled in the Salt Lake Valley. The harvest of 1847 was scant, and great hopes were centered upon the crops for 1848. Eagerly the farmers — aye, and their wives and older children — watched the sprouting grain, and prayed for its protection until fully matured. For a time all seemed well, God's favor was smiling upon them, the fields were growing richly towards an abundant harvest, when, suddenly, the air to the east and north was darkened as by a coming storm, and down from the mountain heights there descended a flood — not of rain or hail — but of Rocky Mountain crickets. As they came down the canyons and fertile slopes they devoured everything before them. Not a leaf on a tree, a blade of grass, a weed, a green thing of any kind escaped. Consternation filled every heart. Had God deserted them? Were the plagues of Egypt to be let loose upon them? Could nothing be done? While some, doubtless, knelt and prayed, those who deemed themselves more practical gathered together in bands — men, women and children — and with sticks, sacks, old garments, met the living flood in the hope of arresting its progress. Stark, certain famine stared them in the face, and they worked with the desperation of despair. But on came the flood! No sooner was one cloud-full met and slain than another emptied itself upon them, and the storm seemed endless.

When, suddenly — ah! is the age of miracles past? Does God especially intervene now-a-days in the affairs of

men? The answer is found in men's own conceptions. I simply record the facts. When the hearts of the pioneers were breaking with despair, when their bodies were too exhausted to struggle further, a new cloud arose *in the West,* which soon resolved itself into a flock of sea-gulls from the lake, which fell upon the crickets and swallowed them as fast as they fell. Millions upon millions were thus destroyed.

But I can imagine the gloom of the pessimists who still saw the eastern clouds dark and lowering. What would become of them when the gulls had eaten their fill? Then, surely, their fields would be devastated. The supposition seemed reasonable! But no! God, Nature, Providence does not always do now what seems reasonable to some men, though He may to others. As fast as the gulls gorged themselves, they spent a few moments in disgorging, and then set to with greater appetites than before, until, at last, even that apparently invincible, because innumerable army, was totally destroyed.

That the Mormons were not unmindful of the part played by the sea-gulls in their salvation from famine is evidenced by the Sea-Gull Monument in the Temple grounds, in Salt Lake City. This was ordered by the church authorities of Mahonri M. Young, a grandson of Brigham Young. It is a fine piece of work, giving bas-reliefs of the story, and with the most graceful flying gull surmounting the column. Artists the world over regard this as the work of a genius and such, certainly, Mr. Young should be regarded.

It was unveiled October 1, 1913, before a large gathering of people among whom were found many of the pioneers who saw the scourge of crickets and witnessed the gulls as they destroyed them, who were delighted thus to have the, to them, miraculous deliverance commemorated.

When the Utah pioneers first began their reclamation of the desert valleys by plowing and irrigating, their

LAYING IRRIGATION PIPES, POWELL NATIONAL FOREST.

methods, naturally, were simple and primitive. All work had to be done personally and speedily. There were few laborers, and time was an important factor. In the construction of their dams and canals, therefore, they were perforce driven to co-operative methods. In no other way could they have overcome the obstacles before them.

Then, too, it is evident that when there were few to make demands for the water of a stream all could be supplied. But as the population increased, and demands multiplied, methods necessarily changed. The results are, therefore, that the history of the development of the irrigation systems of Utah are of great importance, in revealing the influences that have molded them and made them what they are. In order to set these facts forward for the benefit of the irrigation world, the government published a comprehensive work, entitled: *Report of Irrigation Investigations in Utah,* under the direction of Elwood Mead. It is a book of 330 pages and many illustrations and clearly outlines how the Utah systems of irrigation grew out of the necessities of the various cases.

Several of these interesting features could well be studied with profit by people in other arid states:

"Chief among these is its system of defining the extent of water rights. Most of the rights to Utah's streams were initiated without public supervision and hence were not defined as to extent, and when they came up for definition the question naturally arose as to what should determine the extent of rights. The general principle announced in the law of 1880 was that all parties should have the right to use water as they had done in the past. In addition, the law provided that these rights should be measured as follows:

"'A right to the use of water may be measured by fractional parts of the whole source of supply, or by fractional parts with a limitation as to periods of time when used, or intended to be used; or it may be measured by

cubic inches, with a limitation specifying the depth, width, and declination of the water at point of measurement, and if necessary, with further limitations as to periods of time when used, or intended to be used.'

"The other arid states have followed the general principle announced by this law, but not the section of the law quoted above. The practice in those states is to define a right as a volume alone, giving the holder of the right the privilege of using that volume of water at any or all times. Under such a practice, holders of early rights who have used water for only a short period each year may later enlarge their use to the great injury of later comers but who found plenty of unused water when they came. Under the Utah law the earlier rights of such holders are limited as to time as well as quantity, and later comers are safe from an enlarged use under the older right. The law of 1903 changed the old system in this respect: It provides for the defining of all rights in terms of cubic feet per second rather than in fractional parts of the whole supply, but retains the provision for limiting them as to time. The granting of rights to continuous flow has been the source of more injustice and controversy in the arid states than any other one cause, and Utah has avoided all this by her provision for limiting rights as to time."

In the early days the irrigation ditches were small, and the work done in the simplest and easiest way to produce immediate results. It was not until 1865 that the Legislature passed an act for the incorporation of irrigation companies. It was expected that development would be more thorough and permanent after that time, but the law failed to empower the companies or districts to issue bonds and this failure practically reduced the law to uselessness, and in 1897 it was repealed. Hence the old method is still largely in operation.

"The typical form of canal company in Utah is the co-operative stock company. The capital stock of such a

company is issued in payment for work or for money, and is usually owned by the owners of the lands to be irrigated by the canal, although outsiders sometimes subscribe for stock. In the Virgin River district the Mormon Church subscribed for stock for the purpose of helping the people of that valley to complete an extensive canal. The stockholders elect a board of directors and officers, who have immediate control of the canal and who transact the business of the company. All expenses of management and operation of the canal are met by annual assessments on the stock. These assessments, like the original price of the stock, are largely paid in work. The water furnished by the canal is divided among the stockholders in proportion to the stock held by each, and no water is furnished to others than stockholders, but stock may be sold or rented, and the water delivered to the new party. It is thus possible for stock to be owned by those not owning land under the canal, and for the stock to accumulate in a few hands, but so far neither of these tendencies has manifested itself.

"A modification of this plan is known as the incorporation of a stream. Under this plan all parties who have acquired rights to a stream deed their rights to the company which is to control the stream. In return for this they receive stock in the company, usually in proportion to the area of land which each was irrigating with water from the stream. Members of such a company express their interest in the company as so many 'acres of water right.' The companies are managed like the other co-operative companies."

There is another phase of this subject that should be presented. In California, Arizona, New Mexico, Texas, and all the semi-arid states where water has had to be relied upon for irrigation there have been countless quarrels of a serious nature, culminating in hundreds of murders,

over the right to springs, tanks, and flowing water. I could name offhand a large number of novels whose main theme has been the fight between rival claimants for water for stock or irrigation. Yet it is a known fact that in Utah, from 1848 to as late as 1900 — say, a period of fifty years — there were practically few quarrels over irrigation water, and few of them of a serious nature. The reason for that is thus clearly stated by Professor Mead:

"The influence of the Mormon Church in shaping and promoting agricultural development has given to the irrigation system of Utah many interesting and unique features. In the early years of settlement there was no legal provision for acquiring legal titles either to land or water, and without the supervision of the church authorities, acting as arbiters and advisers, there would have been no rule except that of force. With few exceptions, controversies were settled as they arose, without friction, so that irrigated Utah was for many years a land of homes almost free from incumbrance and of industrial institutions well suited to the arid West."

Since about 1900, however, the growing value of water for power purposes, the greater demand of cities and towns for domestic supplies, the lack of unity in religious faith, owing to the constant influx and settlement of non-Mormons, have rendered it imperative that some law, or laws, be established, giving legal title to water and ensuring protection to such title in times of scarcity. These laws were provided in 1903 and Utah has long enjoyed the peace and security that come to her citizens as the result.

There are still many thousands of desert acres that can be successfully and profitably cultivated if sufficient water can be found for irrigation. In most cases, however, this would imply the establishment of irrigation systems of tremendous cost that would be far beyond the power of

SUGAR BEET FIELD.

private enterprise. Hence the United States Reclamation Service is slowly, but surely, grappling with these larger problems. Already there is one Reclamation Service project in Utah. It is located in Utah and Wasatch counties, and is called the Strawberry Valley Project, because its reservoir is located in the valley of that name. The irrigable area is about 4,600 feet above sea-level, and the temperature ranges from 10° to 95° Fahr., hence it can readily be seen that the scale of vegetable products is very limited, comprising in fact mainly alfalfa, hay, cereals, sugar-beets and the hardier fruits and vegetables.

Water is stored in the reservoir, then discharged through a three and three-quarter mile long tunnel, driven through the Wasatch range into Diamond Fork, a tributary of Spanish Fork. Electric power is developed and the project furnishes full or partial water to 70,000 acres in Utah county.

Thus the good work of irrigation goes on. What the future has in store for Utah in this regard, it is yet too early to prophesy, but it is perfectly safe to say that as thousands of acres in the past have been reclaimed from the desert and made to blossom as the rose, so will the future see as many more equally reclaimed, when all the water of the state is impounded and used for this beneficent purpose.

CHAPTER XIV

MINES AND THE ORE DEPOSITS OF UTAH

One might wonder what Brigham Young would have said could he have seen, in his day, the book entitled, *The Ore Deposits of Utah.* It consists of 672 quarto pages, with many illustrations, maps and diagrams, and was issued by the United States Geological Survey in 1920. In it all the existing mining districts of the state are described with careful accuracy and reasonable fullness, and a general survey is given of the ore deposits of those regions where no actual mining is now going on. Whether such a book would have changed the great Mormon leader's outlook and feelings towards mines and mining it is impossible to tell. His abhorrence of mines and mining-camps was sociological rather than economic. He was not opposed to mining as an industry, but at that peculiar time he was assured that mining-camps in Utah were undesirable, and was particularly anxious that the industrial efforts of the people should be devoted to the tilling of the soil.

He knew the attraction mines had for the exploiters of the vices of men, — the whiskey-seller, the gambler, the women of loose morals — and he determined with an intensity of desire to save his followers from their evil selves, by refusing to allow any mining within the boundaries of the country over which he had control. As Orson F. Whitney, doubtless echoing the spirit of Brigham Young's utterances, exclaimed: "Who would wish to see Deseret, peaceful Deseret, the home of a people who

had fled for religious freedom and quiet to these mountain solitudes, converted into a rollicking, roaring mining-camp? Not the Latter-day Saints!"

But prohibit he never so emphatically, and fulminate he never so strongly against mines and mining, Fate itself was against him. The natural desires of men to seek out the hidden wealth of the earth was, in itself, a secret, but nevertheless potent protest against his dictum, and when General E. P. Conner gave liberty to his soldiers to prospect for minerals in Utah, and himself became an active promoter of mines and mining, it was inevitable that Brigham's prohibitions should be ignored. Then, too, this condition was tremendously affected, adversely to Brigham's attitude, by the coming of the gold-seekers of '48 and '49, allured by the wonderful discoveries in California. Many of these stopped in Utah and added fuel to the mineral-hunting fever. Hence, even during the lifetime of Brigham, many mines were opened and many hundreds of thousands of dollars taken from the bowels of the earth.

Most romantic is the history of some of the earliest Utah mines. Whole chapters might easily be written upon the Emma, the Flagstaff, the Carbonate, the Tintic and other early day producers, and the attention of the world has been called to the recent marvelous developments of the Utah Copper Company's mine in Bingham Canyon. It is interesting to note that the first mining location in the state was made September 17, 1863, in this canyon, — called the West Jordan Claim — though it was gold and silver rather than copper that the locators sought. Of the "Emma" the less said the better, for, after over two millions had been taken from it, it was sold to English capitalists for five millions and thereupon became the cause of much swindling and scandal. But the Ontario, near Park City, which has had no scandal, in ten years had an output of more than $17,000,000, of which the

stockholders received about $6,250,000 in dividends. The ore of this mine averaged $106 per ton in silver, and the cost of mining was about $34 per ton. This cost was largely increased by the tremendous flow of water in the mine, amounting to 2,000 gallons a minute. To control this, at a depth of 2,000 feet, was no slight task and gigantic Cornish pattern pumping engines were installed for the purpose.

If one were disposed to relate only the romantic features of mining he might tell of the Eureka Hill and Gemini mines in the Tintic district. The former had been worked for some time, but largely near the surface, and while the results had been profitable, they were ordinary and commonplace. Then came along Professor Clayton who had studied similar conditions elsewhere and he urged the proprietors to "go down deep," and also to locate and develop a mine on the opposite side of the gulch. The owners did so, and expended over $150,000 in developing the ground, and thereafter took out into the millions. Mr. C. H. Blanchard, the friend who aided Dallin, the sculptor, in his early days, came to Tintic in 1873. Speaking of one of the mines he says:

"The Centennial-Eureka claims were located in 1876, and the original owners went broke before they struck ore. They finally succeeded in developing pay ore, which resulted in the payment of over two million in dividends. Then they sold what they supposed was a skimmed mine to Bert Holden, at $70 a share, for 30,000 shares, equalling $2,100,000. This formed the basis of the United States Smelting, Refining and Mining Company's wealth. It was considered the greatest mine in the country, as it contained immense bodies of ore, which ran high in value. After buying it, they shipped daily an average of about 500 tons for many years, and the mine is still producing. One car of ore shipped was valued, to my knowledge, at $200,000.

"The Centennial-Eureka owners in their early day struggles offered 7,000 shares of the capital stock of 30,000 to anybody who would pay the expense of perfecting titles to the claims held. J. A. Bamberger accepted the offer, which gave him about one-fourth of the total stock issued, from which he received about $500,000 in dividends paid by the original company. He also received nearly $500,000 of the purchase price paid for the mine by the United States Smelting, Refining and Mining Company through Bert Holden. In addition, he received a commission for negotiating the sale. Hence he came out with over a million dollars in return for the small amount spent in acquiring government title to the claims."

An equally interesting and romantic story is told by Mr. Blanchard of the Eagle and Blue Bell mine, which already showed the need for competent and experienced management in mining as in everything else. This mine was located and sold to Cincinnati people for $60,000, half cash, balance in six months. A manager was sent out from Cincinnati and, although the shaft was only thirty feet down he decided a mill should be built *at once,* for the reduction of the ore. This done he discovered that he had "bit off more than he could chew." His mine did not produce enough ore to keep the mill going. While there was a little ore at the bottom of the shaft it was soon exhausted, and the eastern manager soon grew tired, sold the mill, abandoned the mine and returned to his home feeling that he had been swindled. In reality he had been misled only by his own ignorant over-confidence. As the mine was not yet patented, and the eastern purchasers failed to keep up the necessary assessment work, in due time their claim lapsed, and others relocated it, several times over. The last relocators were John McChrystal and Owen Donahue, under the name it now bears. The tunnel was run about 1,200 feet into the hill, but nothing found. This so discouraged Donahue that he sold out to McChry-

stal for a "mere song," congratulating himself upon getting even that much out of the affair. McChrystal now went to the old shaft and sank it deeper, thus uncovering some rich ore. He now pushed the tunnel further into the hill until it was under the shaft, and here he found larger and richer bodies than those of the shaft itself. He worked the mine profitably until the big slump in silver came, in 1893, and then closed the mine down, remarking: "I'm not going to sacrifice my ore at these prices. I can afford to wait until prices come back to normal." He died, however, before that time came. After some years of rest and then of desultory working the mine was sold to a Boston, Mass., company. They took out a large quantity of ore, then borrowed money to the tune of $300,000, searching for more. The bankers who had loaned the money refused to make further advances, and a new company assumed the obligations and took possession. The new superintendent seemed to be wasting a vast amount of the money of the new owners, for he followed a thin iron-stained seam for over 800 feet until paying ore was struck. Then it was found in immense quantities. The old debt was paid off, as well as the new one, and a new electric hoist, one of the best in the district, erected, and over $700,000 has been paid in dividends. The company has a good surplus in the treasury, and enough ore *in sight* to keep up the work of extraction for years.

Similar stories can be told of a score of Utah mines, so that while some men have lost, others have made large fortunes in them.

No modern romance can surpass the story of the development of the Utah Copper Company's enterprise in Bingham Canyon. To tell the whole story, even in brief, would exhaust far more than half the pages of this book. Early in 1887 Colonel Enos A. Wall, of Indiana, who was essentially a miner and dealer in mines, rather than a

promoter, located three copper claims in Bingham Canyon. While he was able to do the assessment work he was financially unable to undertake development on a large scale. In 1896 an excitement in copper was caused by the shipment of rich ore from the Highland Boy, a nearby mine, and this found Colonel Wall with ownership in 200 acres of ore-bearing land, in which he had expended $20,000 for exploratory work, as represented by about 3,250 feet of tunnels, drifts, and cross-cuts. At this time Captain Joseph R. DeLamar came upon the scene, and having an acquaintance with Colonel Wall, he began negotiations for an interest in the mine. Wall gave him a six-months' option and three-quarters of the property for $375,000. A test was made on seventy-six tons of ore, but, in the meantime, the price of copper declined, and the test revealing only a very small percentage of copper, assay 2%, and a concentrate containing 28 to 33%, the recovery being 60 to 62%, he allowed the option to lapse.

Three years later he took the matter up again, and finally secured a quarter interest for $50,000.

Now appears on the scene one D. C. Jackling, a young man of poor parentage, but who had worked his way through the Missouri School of Mines, graduating in 1892. He was a member of DeLamar's mining staff, and thus became acquainted with the Bingham property. He was a man of vision, of imagination, and of intense energy and concentration. In 1899 he and an associate made a report on the mine, which shows his complete grasp of the situation. While all the assays made revealed no larger average yield than 2% copper, the immense amount of ore intrigued him, and set his active mind to figuring upon some way to utilize it to the fullest advantage. He estimated that the mine, as already developed, had a body of over twelve million tons of ore in sight, but that to properly equip the mine for success-

ful working, put in a concentrator, smelter, and refinery and a railway to take the ore thither would cost over a million dollars.

Nothing further, however, was done by DeLamar, and soon Jackling left his employ, working successively in Washington and Colorado. But, busy though he was, building mills, operating smelters and the like, his vision of the great possibilities of the copper property at Bingham never left him. In due time he succeeded in enthusing his new employers with his own conceptions, and in time, after considerable—what might be termed—financial dabbling and jockeying, Colonel Wall made an agreement by which he was to receive $385,000 for 55% of the entire property and the new group of owners was to buy DeLamar's quarter interest, leaving Wall with a 20% holding in both shares and bonds. The option was for six months, with the privilege of an extension for twelve months more on payment of $5,000 in cash for each monthly extension of time. They did use seven months extra and for that they paid $35,000, so that Wall eventually received $420,000 in all. They bought DeLamar's quarter for $125,000.

An expert, F. H. Minard, was at once sent to examine carefully and report on the property. This report is dated April 23, 1903, and on June 4, the Utah Copper Company was organized, under the laws of Colorado, the capital being $500,000, in shares of $1 each. After several changes in capitalization to allow the purchase of additional property, to build the great Magna Mill at Garfield, and other necessary enlargements and improvements, in January, 1910, the capital stock was increased to $25,000,000, of which up to the end of 1918, $16,244,900 in $10 shares had been issued. Out of the stock issue, amounting to $8,282,240, made in 1910, the sum of $3,100,000 was paid for the property of the Boston Consolidated and $4,455,120 for 1,000,152 shares of Nevada

Consolidated, the latter being a highly successful copper enterprise at Ely, Nevada.

As soon as sufficient cash was provided for the satisfactory operation of the mine on a scale commensurate with its size, Mr. Jackling and his associates set themselves to the discovery of cheaper and more efficient methods of mining, milling, concentrating and refining the ore. And it is a startling tribute to their genius that from the day when production begun, in 1907, to the end of 1917, the mine has yielded 67,220,700 tons of ore, averaging 1.428% copper, producing 3,118,385 tons of concentrate, averaging 19.81%, and containing 617,785 tons of copper, enabling the company to pay $75,770,882 in dividends and accumulate a working capital of $48,293,528.

Of the bitter fight waged by Colonel Wall upon Mr. Jackling and his associates because of differences in ideas of management, one might write a book, but as the former owned $150,000 in bonds and 90,000 shares of stock in the 1904 organization and these undoubtedly were *converted* into new bonds and stock of the present organization, he certainly had no reason to complain of the results accruing to him on account of the genius of management displayed by the man he professed to dislike.

Let it here be said that no intelligent visitor to Utah will fail to visit Bingham to see this colossal and unique mine, and Garfield, where the mills treat about 37,500 tons of ore *per day*. It is hard to realize that a private corporation is moving more material each day with its steam shovels, than the greatest amount ever handled at the Panama Canal. Yet so vast is the ore deposit that, even though not another ounce of mineral-bearing rock is discovered the mine still has enough "ore in sight" to keep the mills working for another *thirty-five years*.

The bituminous coal production of Utah is large, reaching in the neighborhood of 4,000,000 tons annually. It is

of excellent quality, burns freely with a low percentage of ash, and evolving 14,000 British thermal units per ton. The Castle Valley or Book Cliff Coal Fields, in the central part of the state, are the chief producers, though coal is found in a number of fields. The Sunnyside coal is converted into coke, at the rate of 1,000 tons a day, all of which is consumed by western smelters.

Placer mining for gold has been carried on for a number of years in Utah, especially in the Colorado River and its main tributaries, Grand, Green and San Juan Rivers. Indeed in 1892 there was a stampede to the San Juan, owing to the reports of an Indian trader, named Williams. He said fabulously rich deposits had been found both in the river placers and the sandstones adjacent, and though it was midwinter, several hundred men rushed to the region and " staked out " the river and its tributaries for many miles. After much fighting, quarreling and bloodshed, it was found that the gold was too fine to be worked on a small scale, and no one had capital enough to attempt the workings on a large scale, so the region was practically abandoned. Desultory dredging and panning had been done on the Colorado for many years, but the returns do not seem to have justified long or extensive operations. Some years ago I made a trip up Glen Canyon, from Lee's Ferry, and three or four members of the party enthusiastically panned various sand-bars for gold. I have a small bottle of the precious metal gained at that time, but nothing further was done.

This chapter necessarily is sketchy and merely strikes a few high points. Merely to list Utah's paying mines would require many pages. In 1917 her mines yielded over $100,000,000, with copper as the principal metal. Salt Lake City today is the greatest smelting center not only of the United States, but of the world. What the future holds for the miner in Utah, no one can foretell, but it is indisputable that mining is yet in its infancy.

And the government volume already referred to, *Ore Deposits of Utah,* gives abundant evidence that there are as many, and doubtless many times as many, opportunities for the gaining of vast fortunes in Utah mines as there have been in the past. Those interested should not fail to secure this useful and practical volume, as it contains a wealth of information not to be gained elsewhere.

CHAPTER XV

THE NATIONAL FORESTS OF UTAH

To the stranger within her gates the mountains of Utah are a source of unceasing and enthusiastic interest. From beautiful Bear Lake on the north to the majestic domes and spires of Little Zion on the south, these lordly ranges cast the spell of their attraction upon the visitor. And for those who respond to the call there is no disappointment. Do they seek health? It is there in the invigorating air and sunshine, away from the heat, the dust, the smoke and nerve destroying noise and rush of the cities. Or wealth? Already Utah's mountains have yielded wealth untold in minerals, in products of the live-stock ranges, in the water which is the life-blood of her irrigated agriculture. And yet development of the mineral, timber, forage and water resources has but begun.

Is pleasure the objective? The joys of the open road are on every side. Scenic beauty and grandeur delight the eye and feast the soul. Camp life in the shelter of mighty forests, the pleasures of the rod and gun, tempt the sportsman, the weary business man and their families as well. The giant peaks, rugged canyons, weird geologic formations, natural bridges, the ruins of the cliff-dwellings and other reminders of the ancient civilizations of the region call with compelling voice the mountain climber, the scientist, the artist and the lover of the great outdoors.

Within the shadow of these rugged ranges dwell a half million busy, prosperous, contented people. To these the mountains ever within their view are more than an inspi-

ration and delight. In them the Utahn sees the primary sources of the wonderful productivity which has made possible the progress and development of the state and which is so closely, so vitally, related to the daily welfare of the individual citizen.

Twenty years ago these great mountain areas were in danger of rapid devastation. The timbered slopes, producing the wood products which, with the nearing exhaustion of other sources of supply, will be so essential to continued civic progress, were afforded no protection against fire, reckless cutting, mismanagement or wasteful exploitation. The vast areas of livestock range were steadily being turned into dustbeds through subjection to over-intensive and uncontrolled grazing. In those days the traveler in the valley might count the herds upon the nearby mountain-sides by the clouds of dust which rose above them. The future of irrigation, the continuance of pure and plentiful supplies of water for domestic use were threatened through the destruction of the forest and vegetative cover on the mountain watersheds. Without the restraining influence of such cover, early and disastrous spring floods, followed by extreme shortages of water during the dry, summer months, were inevitable, with all their blighting effects upon agricultural development and upon community life and growth.

It was the recognition of this situation which led to the establishment of the National Forests, twelve of which are in Utah. These forests now include the principal mountain ranges of the state; the Uinta range in the northeast, the Wasatch range running generally north and south down through the central portion, nearly as far as Nephi in Juab county; together with the more isolated Elk Ridge, Abajo and LaSal ranges in the southeast, the Pine Valley group in the southwest and the Bear River and Raft River ranges in the northern portion extending up

into Idaho. They are approximately eight million acres in extent.

These ten National Forests, with ten others in southern Idaho, three in Nevada, three in southwestern Wyoming, and the Kaibab, just north of the Grand Canyon in Arizona, comprise what is known as the Intermountain District of the Forest Service, and are under the jurisdiction of the District Forester at Ogden. Each forest has its own local administration, under a Forest Supervisor. Headquarters for the Utah forests are now located as follows:

Ashley.....Vernal, Utah.
Cache.....Logan, Utah.
Dixie-Sevier .....Cedar City, Utah.
Fillmore-Fishlake... Richfield, Utah.
LaSal.....Moab, Utah.
Manti.....Ephraim, Utah.
Minidoka.....Burley, Idaho.
Powell-Sevier .....Widtsoe, Utah.
Uinta.....Provo, Utah.
Wasatch.....Salt Lake City, Utah.

In the administration of these great natural resources as National Forests the aim first has been to provide adequate protection against devastation by fire, reckless cutting of timber, and deterioration of the ranges and watershed values through overgrazing, or other abuses. This accomplished, all efforts are bent toward the development and fullest possible utilization of all the resources which the forests afford, consistent with conservation and perpetuation.

At the time the National Forests were established means of travel and communication within and adjacent to them were seriously deficient over the greater portion of their area. It was thus necessary for the Forest Service to first open up the forests — to build roads, trails,

and telephone lines that a system of fire protection might be worked out and applied, and the hitherto inaccessible resources made susceptible to proper utilization. It was necessary to select and improve administrative sites, to construct stations and facilities for its field force, and to increase the value and utility of the livestock ranges through the development of stock watering places, the construction of drift and division fences, and many other range improvements. Much has been accomplished toward these ends — much more remains to be done, but the work is steadily pushed onward as funds for the purpose become available.

The fire menace was soon brought fairly well within control. Comparatively speaking the natural fire hazard of the Utah forests is not high. Climatic conditions, the rarity of dry electrical storms, the more or less open, broken stands of timber and the well watered slopes all contribute to this situation. The serious forest fires which in early years wrought destruction of immense values in the heavily timbered Uinta and the northern Wasatch mountains were largely the result of human carelessness or the misguided but intentional use of fire by the early settler and the Indians for purposes of clearing land, driving game into the open, or in other pursuits within or near the timbered areas. These factors have been largely eliminated, although every year has witnessed a number of serious fires in the forests of the state. Now with the advent of thousands of recreation-seekers annually, eternal vigilance, and thorough-going organization, together with intensive campaigns to impress the traveling public with the great necessity for the utmost care with fire in the woods is the price of adequate protection.

Reckless waste of timber in the forests of Utah is no longer a problem. The limited cutting which is done is now carried on in a way which gives the operator all that

he can reasonably ask in the way of a profitable operation, and yet looks to the perpetuation of this great timber resource which within the not far distant future will be vitally essential to continued civic progress.

Utah is not a heavily timbered state. Nevertheless, the 95% of her timber which is found within the National Forests constitutes a resource of immense value which will be increasingly drawn upon in the upbuilding of her industries and communities.

The native timber species of Utah are western yellow pine, engelman spruce, lodgepole pine and douglas fir, while the cordwood species are quaking aspen, juniper and pinyon pine. Between seven and eight billion feet of merchantable saw-timber, railroad-ties and mining-prop material is available. In addition there are vast tracts of aspen which will some day supply pulp mills throughout this region.

Utah's heaviest bodies of timber are found in the Uinta range where there is estimated to be three billion feet of mature timber; on the Aquarius Plateau of the Powell Forest in the south with a stand of a billion and a quarter board feet; and on the watershed of the Sevier River with a quarter billion feet. The entire Wasatch range offers large quantities of merchantable timber and cordwood.

At present the few small mills in operation cut approximately $30,000 worth of stumpage each year and supply less than one-tenth of the local demand for lumber. This is true simply because it has hitherto been possible to supply the Utah market from the highly developed lumber regions of the Pacific Coast more advantageously than from the comparatively inaccessible and undeveloped native forests.

With the steady development of transportation facilities and the opening up of the local timbered regions there are presented increasingly excellent opportunties for

A FOREST RANGER'S CORRAL IN A UTAH NATIONAL FOREST.

a number of large local sawmills. The available timber resources and local market conditions are becoming more widely and favorably known, and the lumber industry must soon develop to a position of much greater importance among the industrial activities of Utah. Pulpwood possiblities are already being investigated with growing interest, and as there is a vast supply of aspen available and suitable for the manufacture of paper pulp, the establishment of one or more large pulp mills in northern Utah can only be a question of time.

The grazing of livestock now constitutes one of the most important uses to which the National Forests in Utah are put. Annually these great forest ranges supply summer pasturage for nearly a quarter of a million cattle and horses and over a million head of sheep, owned by over nine thousand farmers, ranchers, and stockmen of the state. The apportionment of the range privileges among the different classes of stock, and their owners, on a fair and impartial basis; supervision of the use of the range; the care and proper handling of the stock and its distribution over the forest areas constitute one of the greatest problems of National Forest administration. Nowhere is the demand for forest range so intensive as in Utah. Nowhere is there greater need for so administering forest ranges as to provide for the greatest possible numbers of stock and yet fully conserve the watershed values of the mountain slopes. Far below in the valleys lie the irrigated lands, the basis of the key industry of Utah. The farmer looks to snow-clad mountains for that ample and regular supply of water without which his efforts avail him nothing. And he must not look in vain. Nor must any abuse be allowed which would impair in any degree the purity or the flow of these crystal mountain springs and streams which supply the domestic needs of the cities and towns.

Fifteen years of application of sound principles of

range administration have clearly demonstrated the practicability of harmonizing the needs of the livestock industry, the farm, and the municipality. Hitherto, inacessible range areas have been opened up through the development of watering places, better distribution of the stock on the range is secured through better methods of salting, and through the construction of the great range fences. Improved methods of handling the stock have been devised and brought into use. The elimination of poisonous or inferior native feeds from the range progresses steadily. Grazing periods have been shortened where necessary to secure the best growth of the forage. Studies designed to search out better methods never cease. The results are better watershed and range conditions, more stock on the ranges than ever before, greater production of meat and the by-products of the livestock industry.

The stockmen themselves take a great interest in the management of the forest ranges. Over a hundred community livestock associations have been organized within the state and are actively cooperating with the forest officers. These associations exert a very healthy influence toward better grades of stock, methods of marketing, herding, salting, and general handling of the stock. Naturally the Forest Service does everything it can to encourage the formation of such associations and to support them after organization.

The old range wars are a closed chapter. The old and wasteful methods are steadily discarded. In their place is growing the spirit of cooperation and open-mindedness toward new and improved methods and ideas. Utah's livestock industry thrives, without injury to the resource on which it so largely depends.

During the past few years a thorough classification of the lands within the National Forests has been completed, and all land found chiefly valuable for agriculture has been thrown open to entry and agricultural settlement.

Prior to the classification many good agricultural tracts were so opened and many profitable farms may now be found within the forest boundaries. There remains but little land of true agricultural value which has not been settled upon and improved.

Many other minor uses of the forest resources are in effect under the government policy of fullest possible utilization and development. Many special use permits are issued on the forests every year, some for which nominal charges are made and some entirely free, which involve the construction of reservoirs, ditches, conduits, private telephone lines, cabins, corrals, pasture fences, the cutting of wild hay and a wide variety of other desirable uses.

Water-power development is one of the most promising future uses of the forest resources. The swift mountain streams offer sufficient power to meet every need of the state's growing industrial activities and under recent legislation great strides in power development are to be expected.

An interesting sidelight on the administration of the National Forests of the state is afforded by the Great Basin Forest Experiment Station on the Manti National Forest. Here the scientific side of range management is brought to its highest development. The applied results of studies conducted at this station and dealing with stock handling methods, range plant life, the effects of erosion, overgrazing, unseasonal grazing and similar features have contributed tremendously to the advancement of range administration in Utah and to the welfare of the Utah stockgrower.

Utah's National Forests are a self-sustaining business enterprise. Although they were not established for profit paying purposes primarily and are not administered with immediate profit as a prime objective, the receipts from the sale and use of their resources each year already

exceeds the cost of their protection and administration. Each year twenty-five per cent. of the gross receipts is returned to the state for road and school purposes. This annual return has grown from $9,000 in 1909 to nearly $70,000 in 1919.

Another ten per cent. of the forest receipts has been expended by the Forest Service each year since 1912 for road construction within the state. This ten per cent. fund amounting to $13,500 in 1912 now is more than double that amount.

Special legislation by Congress in and subsequent to 1916 has given a tremendous new impetus to road building activities in Utah as throughout the entire west. The counties, the state and federal government are cooperating in the rapid extension of the state highway system on an auto travel basis. As the result the great natural resources of the region are swiftly becoming more and more accessible, more widely known and appreciated. More rapid development must follow as a natural result.

Nothing serves to emphasize this situation more than the sudden rise to national prominence of the recreational and scenic attractions of the Utah National Forests.

A few short years ago the wondrous charm of Bear Lake, forty miles northeast of Logan, was known only to the people of the nearby country and the small number of tourists who braved the rather difficult and trying journey to its shores. Today a first-class auto highway from Logan to Garden City, two miles from the lake shore, is maintained by the local authorities and the Forest Service. An excellent auto road extends around the lake, which is nineteen miles long and seven miles wide. Its shores are lined with rapidly growing summer resorts, private cottages and camps, and thousands of visitors annually find it the ideal vacation center of northern Utah.

The approach to the lake from Logan is through the wondrous Logan Canyon, a drive affording a continuous

TEMPLE OF LATTER DAY SAINTS, LOGAN.

feast of scenic beauty and grandeur. Nearly one hundred summer homes have sprung up in the past few years along this canyon road, and other delightful sites have been prepared for lease at nominal rates by the Forest Service. Logan River is abundantly stocked with trout each year, but the stream is heavily fished by the local people and the tourist, and considerable skill is required to catch a good string. Excellent free camping grounds are found along the river.

The Wasatch National Forest embraces the Wasatch range from Provo Canyon on the south, to City Creek on the north, Stansbury range south of Great Salt Lake and the north and west side of the Uinta range, thus including part of the headwaters of Green River and the headwaters of Bear, Provo and Weber Rivers, together with the small streams draining into Salt Lake Valley. The maintenance of favorable stream-flow conditions on these watersheds is vitally essential to the prosperity and health of Salt Lake City and the most populous section of Utah.

Located along the courses of the streams of this section are power plants having a total water-wheel installation of 120,000 horse-power. Practically the entire amount of electrical energy transmitted from these plants is consumed as power or light in Salt Lake City, Ogden, Provo, and the intervening small towns. The immediate watersheds of the streams which furnish Salt Lake City's water supply, are protected under a cooperative agreement between the city and the Forest Service.

Mt. Timpanogos, the highest and most prominent peak of the Wasatch range, lies just within the southern limit of the Wasatch forest. The construction of good auto roads to its base and trails to the summit are resulting in the placing of Mt. Timpanogos and its tiny glacier at the head of the attractions of this region and spreading the fame of this grand peak from one end of the land to the other.

The peak is somewhat isolated, rising abruptly 7,500 feet above Utah Valley and separated from other parts of the range by the deeply cut canyons of Provo and American Fork Rivers.

The western face is a great fault scarp, bold and rocky, but barren because of the intense heat generated under the perpendicular rays of the summer's afternoon sun. The eastern slope is somewhat more gentle although deeply trenched by great canyons excavated by the combined work of running water and ancient glacial ice. On this side are found magnificent groves of quaking aspen, fir, and spruce and it is abundantly supplied with clear mountain streams which cascade down the ledges from the perennial snow banks which lie protected in the shadow of the great cliffs.

Because of the beauty and scientific interest of this eastern side, the Forest Service, upon the solicitation of the Timpanogos Nature Club of Provo and other interested persons and institutions, has withdrawn from grazing and other forest operations about 800 acres of land. Within this area lies the miniature glacier and lake for which the mountain is noted, as well as scores of magnificent waterfalls and a most wonderful flora and fauna comprising species native to all latitudes north of 40°. Here the geologist, the physiographer, the botanist, the zoologist, and the entomologist as well as the mere lover of the beautiful in nature may find a veritable paradise.

The main aspects of this portion of the mountain were determined by the work of an ancient glacier, which, during what is known geologically as the " Ice Age " had its birth near the mountain crest and advanced down the canyon of the North Fork of the Provo River to a point only about three miles above the junction of North Fork with the main stream. This ice-mass formed three great cirques or amphitheaters near the mountain top, swept the debris from the sides and bottom of the main canyon,

OLD MILL ON CITY CREEK, NEAR SALT LAKE CITY.

planed away the projecting spurs, and then, melting, under the heat of the lower altitude, deposited its earthy load to form the system of terminal and lateral moraines which remain to tell the story of that age.

The present tiny glacier — which is probably the only remaining remnant in Utah of the great alpine glaciers of the Ice Age — lies in the embrace of one of the great cirques near the mountain top. Around its edge runs the true "*Bergschrund*" of glaciers and at its foot lies a diminutive glacial lake. This glacier is perhaps one mile long, one-quarter mile wide, and has an estimated thickness of 150 or 200 feet. Its movement is very slight, though real, as is indicated by the recent bunching up of a moraine across the lake, and the undulatory surface of the central portion of the glacier itself.

Here it lies today, crossed annually by increasing hundreds of "hikers," telling, to one who has eyes to see, the story of the ages gone.

There is little doubt that to everyone a climb to the narrow crest of this monarch of mountains is an inspiration, revealing as it does through the clear air of this western land a veritable sea of mountain and valley rolling off below in every direction, billow upon billow, until finally lost in the blue haze of the far distance.

In making a trip to Mount Timpanogos, one should endeavor to take in American Fork Canyon as well as the Provo Canyon. A trip through these canyons will add greatly to the enjoyment of the vacation.

American Fork River for the last four miles of its journey has cut its channel through the Wasatch fault, and this channel has not been smoothed by glaciation. The contrast of this rugged gorge with the smooth rolling hills of the higher valley is one of the most striking features of the Wasatch range.

The Uinta Mountains are the highest in the state; the peaks range from 12,000 to 13,498 feet. Kings Peaks

with elevations of 13,496 and 13,498 are the highest in Utah. These mountains offer scenery of wonderful beauty to those able to stand the hardships and who have the time for a trip. From any of the high peaks glacial lakes and rugged mountain crags can be seen as far as the eye will reach. From the backbone of the range streams flow north and south through high mountain meadows and from lake to lake until lost in the heavy timber of the lower slopes.

Fishing is to be had in all the streams and lakes, and beautiful camping grounds are to be found wherever night overtakes one.

A report by the Geological Survey thus describes the region:

"The scenery of this elevated region is singularly wild and picturesque, both in form and coloring. In the higher portions of the range where the forest growth is extremely scanty the effect is that of desolate grandeur; but in the lower basin-like valleys, which support a heavy growth of coniferous trees, the view of one of these mountain lakes, with its deep-green water and fringe of meadow-land, set in the somber frame of pine forests, the whole inclosed by high walls of reddish purple rock whose bedding gives almost the appearance of Cyclopean masonry, forms a picture of rare beauty."

To the camper with but a week to spare, Big Cottonwood Canyon offers the best in the Wasatch range. There is a good auto road through this rugged canyon, which opens to a beautiful mountain valley at the head, surrounded by mountains extending above timber line. Special camp grounds have been improved by the Forest Service near the head of the canyon for the benefit of the public.

Brighton, in Big Cottonwood Canyon and twenty-six miles from Salt Lake City, is one of the choice summer colonies of Utah. Hundreds of people spend their sum-

mers here among the lofty peaks and glacial lakes of the Wasatch range. Near Brighton several blocks of excellent summer home sites are rapidly being leased by the Forest Service to those who wish to erect their own permanent summer camps.

Much of the region within and adjacent to the Uinta Forest, with headquarters at Provo, is now traversed by good automobile roads. Strawberry Valley, wherein nestles the great Strawberry Reservoir, an artificial lake seven and one-half miles long and five miles wide, is readily accessible to automobiles. This beautiful valley was at one time extensively used by the Indians for camping, and probably for burial grounds. Before their rude wickiups stretched thousands of acres of level lowland, on which their animals grazed. Fish were easily caught in the many streams, and deer were plentiful on the nearby mountain slopes. Small mounds are noticeable where once their summer homes stood. The white man's hand has changed the scene. The level lowlands are now covered with immense bodies of water that eventually find their way to Utah Valley, to be used for irrigation and reward the farmer for his day of toil. It is difficult to find in the Uinta Mountains a place more beautiful, and in a short time the lake will be fringed with summer homes and resorts.

Along the west and north forks of Duchesne River, Rock Creek and their tributaries, may be observed the daily work of numerous colonies of beaver, impounding the waters of the streams. On the north portion of this forest are numerous lakes, filled with trout, and exceedingly beautiful in their forest settings.

In the Rock Creek and North Fork of Duchesne country, perpendicular cliffs of igneous rock rise thousands of feet. These formations have weathered so slowly that the surface presents immense bodies of rock thrown in every direction and impassable to any kind of domesti-

cated animals. Numerous lakes lie at the head of Rock Creek, surrounded by immense forests of lodge-pole pine and spruce timber. The waters of the lakes are as clear as crystal, and mirror the outlines and pictures of the country surrounding them with beautiful effect.

Immediately north of the lakes rise Mount Agassiz, which is 12,433 feet high; Bald Mountain 11,947 feet; Reid's Peak 11,970 feet; and Hayden Peak, 12,419 feet. Trails and roads will gradually extend into this country, and many people will delight in its wildness and natural beauty.

On the southern part of the forest, near Nephi, in Juab County, is located the well-known Mount Nebo, towering to a height of 11,690 feet, which was for years believed to be the highest mountain in Utah. A considerable part of the summit of the mountain is above timber line, and immense snow banks of semi-glacial formation daily glisten in the summer sun. A few years ago the commercial club and leading citizens of Nephi procured elk to graze upon Mount Nebo, and it is no uncommon sight for those who climb the mountain during July and August to encounter one or more herds of elk. It is estimated that there are now about forty-five head in this locality.

The Fishlake National Forest derives its name from Fish Lake, which is located within its boundaries. This lake has always been and is today one of the chief pleasure-resorts of Utah. It is so named because of the great number of native trout with which it abounds. These trout are a distinct type and average about two pounds in weight, the meat being red and very firm. In the spring of the year these trout go up the small streams running into the lake, for spawning, and provide a very picturesque sight, on account of their great number. In the early days these fish furnished an important item of diet for the Indians and early settlers.

The State Fish and Game Department has now stocked the lake with six additional varieties, among which are the eastern brook trout, rainbow, steel-head and mackinaw. The steel-head and mackinaw are becoming very large, and many are caught weighing from twelve to twenty pounds.

Fish Lake has many beautiful camping-places and a cool climate. It is located forty-five miles from Salina and forty miles from Richfield, and can be reached by a fair road with either automobile or team.

The lake is about seven miles long and in places exceedingly deep. Its bed is at an altitude of over 9,000 feet above sea level.

Even in summer the thermometer at the lake will drop to freezing nearly every night, so that a heavy coat or wrap is comfortable both evening and morning. The lake freezes over in November and the ice does not break up until the following April or May.

To the north of Fish Lake is Seven Mile River, one of the main streams forming the Dirty Devil or Fremont River. Here is Mount Marvin, rising to an elevation of 11,800 feet, one of the highest peaks in the state. On a clear day one is able to see into seven counties of Utah from the top of this peak.

As a recreation area, the Sevier National Forest offers scenery probably unsurpassed anywhere in western America, together with excellent fishing and hunting. Many of the most interesting features of the forest are now open to auto travel.

Bryce Canyon, "America's Fairyland," located in the Sevier, is rising rapidly to world-wide fame. It is a scenic gem, presenting to the eye a marvelously beautiful array of towers, spires, minarets, fortresses and cathedrals, as described more fully in another chapter. All the colors of the rainbow are noted in the weird rock formations. As stated recently by an artist of international

reputation, "Bryce Canyon is incomparable." This canyon or, more properly, amphitheater, is within ready access of Salt Lake City. Leaving this point at 10:30 in the morning via the Denver and Rio Grande Railroad, the traveler reaches Marysvale at 7:15 that evening. Here he remains overnight, and the next morning proceeds by auto stage to Panguitch, a ride of three hours and a half, and thence to Bryce Canyon twenty-five miles through Sevier Valley and Redrock Canyon.

Panguitch Lake, a crystal clear body of water in the heart of the west division of the forest, abounds with the famous Panguitch Lake trout. On the shore of this lake a popular summer resort is developing. The State of Utah has a fish hatchery near Panguitch Lake with a yearly production of a million fry.

Another attraction of great interest is the Mammoth Cave. This cave has underground passages from fifty to one hundred feet in width, with the ceiling or roof from five to twenty feet above the floor. The length of the underground passages totals at least a half mile.

The Blue Springs, Mammoth Springs, Tommy Creek Springs, Assay Creek Springs, and the Duck Creek Springs are becoming widely known. These springs have craters from twenty to forty feet in depth and from fifty to one hundred feet across, while far beneath the surface, speckled beauties may be seen swimming in the pellucid waters.

The Dixie Forest, the farthest south of the Utah National Forests, while somewhat more difficult of access than some of the others, more than repays the traveler who makes the journey. This section is reached via the Salt Lake Route, leaving the railroad at Lund, from which point auto stages make the trip to Cedar City, the forest headquarters, and St. George the capital of Utah's "Dixieland," so named because it produced the cotton used by the Mormon pioneers, during the Civil War. St. George

with its semi-tropical climate, is becoming a Mecca for many people who cannot withstand the more rigorous winters at the high altitudes. In its vicinity are produced semi-tropical fruits, such as pomegranates and figs, together with almonds and walnuts. The town is beautifully situated.

The main feature of the Utah Division of the Dixie Forest, is Pine Valley Mountain reaching an elevation of over 10,000 feet. In order to take advantage of the many fine views afforded by the various points along Pine Valley ridge, it is necessary to make a saddle horse and pack trip and camp on the mountain. The numerous small grassy valleys, surrounded by spruce and fir and traversed by springs and streams of the purest water, afford beautiful camping places for those who enjoy nature unadorned and unmolested by the hand of man. From the east brink of the mountain the view is one which for variableness and beauty of coloring is unsurpassed by anything to be seen in southern Utah, where colors of all kinds are scattered promiscuously. Mother Nature has seemingly attempted to make up for the sparseness of the vegetation of the hills by painting the landscape riotously with all the bright hues of the rainbow. Certain it is that in no other section of the West can be found the vivid coloring which is characteristic of these hills. Far to the east a hundred miles or more may be seen the dark blue lines of the Kaibab Plateau whose extreme southern point overlooks the Grand Canyon of the Colorado where it yawns widest and deepest. To the south and east and a little nearer to the observer rises the volcanic dome of Mount Trumbull. In the space between are scattered haphazard hills, valleys, mountains and plains of every shape and hue apparently without regard to design or system. From this point may be seen the spires and domes and cliffs and crags of the Mukuntuweap or Zion Canyon National Park (see special chapter) and its tributaries,

one point of which stands out distinctly in the form of the steamboat of a generation ago. Here the reds, vermillions, and scarlets seem to be spread more generously than at any other point, making the cliffs stand out startlingly distinct against the blue of the sky. Nearer by, the course of the Rio Virgen may plainly be distinguished, and at intervals along its banks are bright green spots dotted with white which we know to be villages. All of these combined form a picture that will hold attention for hours at a time, for the scope is so great that new points of interest are ever being discovered.

TROPHIES FROM FISH LAKE.

CHAPTER XVI

THE COLOSSAL NATURAL BRIDGES OF UTAH

Southeastern Utah is largely a *terra incognita* not only to travelers in general, but even to the great mass of people of Utah itself. In nearly forty years of ramblings, at intervals, either in Utah or the adjacent states, I can truthfully say I have not met a hundred people who have visited this unique region. It has been referred to cursorily in several chapters, and is named now as the location, in San Juan county, of the four most colossal natural bridges known to man. That the region is practically unknown is demonstrated by the fact that it was not until 1904 that the outside world heard of these bridges, though it is claimed they were first seen by white men in 1883. It was not long after this date that I personally rambled over a portion of this country and found it a vast, strange and weird land. In his *Rainbow Trail,* Zane Grey describes it with the pen of an artist. Its glories and fascinations got into his blood, penetrated to his innernesses, and he tries, again and again, to put into words, the sensations and emotions aroused by what he saw and felt. And it is because he succeeds so well that his readers are growing until now they number many millions.

In spite of its inhospitality one is drawn to it with a fascination it is hard to overcome. Though it was wintertime and I suffered severely from cold, how well I remember, and with what rich enjoyment, a trip I made of two or three hundred miles with a friend — a typical west-

erner — in his heavy freight wagon. Day after day we rode, sometimes never seeing a soul in the twenty-four hours. And that was not surprising, for Garfield and San Juan counties, covering an area of 11,784 square miles, or one-seventh the entire state, have a combined population less that found in many a country town of the middle west. How well Zane Grey describes a part of what we saw:

"His gaze seemed impelled and held by things afar — the great yellow-and-purple corrugated world of distance, now on a level with his eyes. He was drawn by the beauty and grandeur of that scene and transfixed by the realization that he had dared to venture to find a way through this vast, wild, and upflung fastness. He kept looking afar, sweeping the three-quartered circle of horizon till his judgment of distance was confounded and his sense of proportion dwarfed one moment and magnified the next. Then he withdrew his fascinated gaze to adopt the Indian's method of studying unlimited spaces in the desert — to look with slow, contracted eyes from near to far.

"His companions had begun to zigzag down a long slope, bare of rock, with yellow gravel patches showing between the scant strips of green, and here and there a scrub-cedar. Half a mile down, the slope merged into the green level. But close, keen gaze made out this level to be a rolling plain, growing darker green, with blue lines of ravines, and thin, undefined spaces that might be mirage. Miles and miles it swept and rolled and heaved to lose its waves in apparent darker level. A round, red rock stood isolated, marking the end of the barren plain, and farther on were other round rocks, all isolated, all of different shape. They resembled huge grazing cattle. But as Shefford gazed, and his sight gained strength from steadily holding it to separate features, these rocks were strangely magnified. They grew and grew into

mounds, castles, domes, crags, — great, red, wind-carved buttes. One by one they drew his gaze to the wall of upflung rock. He seemed to see a thousand domes of a thousand shapes and colors, and among them a thousand blue clefts, each one a little mark in his sight, yet which he knew was a canyon."

And so on. I wish I might quote it all. Copying it recalls another trip when I went alone and rode horseback over scores of these wonderful miles. But with my western friend there was great enjoyment day by day. We forded streams, toiled up and down rocky canyons, and wearied through miles of heavy sand. Each night we camped at sundown, or thereabouts, and while he attended to his horses, I lit a fire, put on his coffeepot, and prepared the evening meal. Then, before I added the coffee to the boiling water, I poured out a sufficient quantity into my capacious cup, into which I had placed a generous portion of my old standby, Horlick's Malted Milk, and while his coffee came to the boil, spread out our repast, which we then enjoyed in the dancing light of the replenished fire. What nights those were! How deep the solitudes! How velvety black the sky and brilliantly large the stars! How startling, at times, the silence! And soothed and comforted by my favorite camping beverage, which, unlike coffee, never kept me awake, but aided me to a night of restful sleep, I rolled in my blankets and soon sank into deep oblivion.

Occasionally in the morning we would find a Navaho or a Paiuti Indian had been camped near us, and his willingness to "rustle" wood for the morning fire indicated that he had very clear and definite designs upon our provisions.

But I must not thus reminisce. We must to the bridges. Let us not forget, however, that it is a country of plateaus and canyons, the main plateau being from 5,000 to 6,000 feet above the sea, formed of rich red sandstone,

into which the forces of nature have cut deep, making mighty monuments, castles, domes, spires, buttes and towers, the like of which cannot be found elsewhere save in the Grand Canyon and on the walls of Zion Canyon and of the Rio Virgen.

Over this plateau country, in 1903, my good friend Horace J. Long, a mining engineer, who was prospecting and placer-mining on the bars in the Canyon of the Colorado, used to ride every once in awhile, to Hite, Utah, for mail. On one of these trips he fell in with a cattleman, named Scorup, who asked him if he had ever seen the "big arches" in White Canyon. Questioning brought fuller descriptions, until Long's interest and curiosity were aroused sufficiently to lead him to arrange to make the trip. It took them three days to ride from Dandy Crossing on the Colorado, and as they approached White Canyon, Scorup began to show signs of nervousness as if apprehensive lest his memory should have led him to magnify the size and grandeur of what he had seen eight years before. Now let Mr. Long tell the story:*

"The canyon varied from perhaps three hundred to five hundred feet in width, and had many curves and abrupt changes of direction. The walls rose to a perpendicular height of about four hundred feet, and in many places far overhung their bases. The bottom was very rough and uneven, and at that season a considerable stream of water was flowing in a narrow channel, cut in most places to a considerable depth below the average level.

"Pushing their horses as rapidly as possible up the canyon, and eagerly making their way around the masses of debris, which in many places had fallen from the cliffs above, the travelers proceeded about a mile when they rounded a short curve in the canyon wall and had their first view of one of Scorup's arches. Extravagant indeed must have been their expectations to experience any dis-

**The Century Magazine*, August, 1904.

appointment at sight of the colossal natural bridge before them. Yet, from the scenic point of view, this bridge was the least satisfactory of the three which they visited. Its walls and buttresses are composed of pinkish sandstone, streaked here and there with green and orange-colored moss or lichens. But its outlines are quite irregular; the projecting walls of the canyon interrupt the view, and the tremendous mass of stone above the arch tends to dwarf the height and width of the span."

In the naming of the bridges neither the original discoverers, nor the government, it seems to me, has been fortuitous. Scorup suggested that this first bridge be named Caroline, or Carolyn, in honor of his wife, but the government officials have changed the name to "Katchina," which is the name of a Hopi divinity. Why not have found the Indian names used by the natives, and learning their significance, have retained them?

The Katchina bridge has a span of one hundred fifty-six feet from side to side, and ninety-eight feet in the center, while the total height is two hundred five feet, with a width on top of forty-nine feet.

" Sharp corners and broken lines here and there in the arch and buttresses show the unfinished work of the artisan. Nature has not yet given the final touches; but wind and storm and driving sand will continue to chisel and polish until the lines are all graceful curves adding greater beauty to the most massive of the bridges. Beneath its broad arch, a spring of cold water invites one to 'bide a wee and dinna fret.' "*

The travelers then toiled another two miles over the rugged and boulder-strewn bed of the main fork of the canyon and there found a second bridge. Long called it Augusta, in honor of his wife, while the officials have designated it Shipapu, which is the Hopi name for the hole of emergence of the spirits from the underworld.

*_The Great Natural Bridges of Utah._ Bulletin of the University of Utah, Nov., 1910.

"The span is one hundred fifty-seven feet high and two hundred sixty-one feet long at the bottom. It is two hundred twenty-two feet from the creek-bed to the top of the bridge, and the road-bed is twenty-eight feet wide. It is the crowning glory of the three bridges. It combines massiveness with gracefulness of proportions that give an altogether pleasing and satisfying effect. . . . One climbs to the cliff above and watches the play of sunshine and shadow upon the warm coloring of the rich reds and browns of the enduring sandstone that forms its arches and buttresses and comprehends the gracefulness of its outlines and proportions as a whole, and he seems unable to tear himself away from the spell its might and beauty throw around him."*

The third bridge is found some six miles from the Katchina bridge, up in Armstrong Canyon, about three miles above where it opens into White Canyon. Long called it the Little Bridge, but it is officially designated Owachomo. Why it should have been called "little" it is hard to understand, for it has a span of one hundred ninety-four feet and an elevation of one hundred eight feet. Perhaps it was so named on account of the thinness of the bridge, for this is a long arch, only ten feet thick in the center and thus gives an impression of lightness and grace that is most pleasing. It is flanked with domes and turrets, nature-fashioned, and nestling in a cave worn into the sunny side of the cliff near one end are the deserted homes of a village of Cliff-Dwellers.

These three bridges comprise what is known as the "Natural Bridges' National Monument," but the same forces that created these have been at work in a near-by region. About midway between the junction of the San Juan River with the Colorado, and the Crossing of the Padres, slightly to the east of the 111th parallel of longitude, another magnificent bridge was found in a canyon

**The Great Natural Bridges of Utah,* Bulletin of the University of Utah, Nov., 1910.

tributary to the Colorado. This canyon is called by the Navaho Indians Nonnezoshie Boko — the Canyon of the Stone Rainbow. While it is a glorious arch of vast proportions it seems less of a bridge than those of White Canyon because the top of the span is not level. It is three hundred eight feet high and two hundred seventy-four feet long, and reaches from the wall on one side of the deep gorge, to a bench on the other. In places below the arch, the cliffs that tower far above and form practically perpendicular walls on either side, draw so close together that there is barely room to pass through by wading the small stream in the narrow channel. In the springtime when the snows melt or heavy rains fall this stream becomes a raging torrent which would endanger the life of the traveler venturesome enough to attempt to pass up the canyon. But even in summertime good water is abundant, though grass is scarce, so that one must provide himself with feed for his horses. That the region is rough and so generally inhospitable that even the Indians keep away from it will deter some people from attempting to visit it, but this will serve as an incitement to others. Zane Grey well describes the thrill as one reaches the point where he is enabled to see beyond the jutting wall that for a long time obstructs the traveler's view:

"A mile beyond all was bright with the colors of sunset and spanning the canyon in the graceful shape and beautiful hues of a rainbow was a magnificent stone bridge.

"This rainbow bridge was the one great natural phenomenon, the one grand spectacle, which Shefford had ever seen that did not at first give vague disappointment, a confounding of reality, a disenchantment of contrast with what the mind had conceived.

"But this thing was glorious. It silenced him, yet did not awe or stun. His body and brain, weary and dull

from the toil of travel, received a singular and revivifying freshness. He had a strange, mystic perception of this rosy-hued stupendous arch of stone, as if in a former life it had been a goal he could not reach. This wonder of nature, though all-satisfying, all-fulfilling to his artist soul, could not be a resting-place for him, a destination where something awaited him, a height he must scale to find peace, the end of his strife. But it seemed all these. He could not understand his perception or his emotion. Still, here at last, apparently, was the rainbow of his boyish dreams and of his manhood — a rainbow magnified even beyond those dreams, no longer transparent and etherial, but solidified, a thing of ages, sweeping up majestically from the red walls, its iris-hued arch against the blue sky."*

This bridge was made a national monument by proclamation issued by President Taft, May 13, 1910, under the title "Rainbow Bridge National Monument." A few miles north of Navaho Mountain there are two other bridges, of large size and relative importance, the "Owl," and the "Crag," but both are dwarfed into insignificance by the White Canyon and Rainbow bridges. Yet there is another great bridge, thus described by Dr. Byron Cummings:

"In November, 1909, under the guidance of Dr. John Williams, of Moab, we visited a natural bridge on the edge of Grand county that deserves to be classed with those of San Juan county among the great natural wonders of our continent. This is a graceful arch with a total elevation of sixty-two feet, and a span of one hundred twenty-two feet long and forty-nine feet high. It stands beside the cliff on the western edge of Pritchett Valley; and has been fashioned under somewhat different conditions from those prevailing during the construction of the other Utah natural bridges. Here there has been no nar-

*_The Rainbow Trail,_ by Zane Grey.

row zigzag canyon through which the waters surged in former times, but quite a large valley, some three miles long and from one-fourth to one-half a mile wide. On the sides of this irregular basin rise rugged cliffs that jut into the valley here and there in sharp points and rounded domes. The upper surfaces of these cliffs stretch back in bare undulating fields of sandstone much eroded by wind and water. Caves have been hollowed out of these cliffs and various and numerous natural reservoirs are found scattered on the surface of these bare rocks where soft places have been found in the stone, or whirling eddies in former ages have ground out cisterns. Some of these are mere shallow tanks, while others reach down twenty feet and more through the solid sandstone. Some are irregular and winding in their course, while others look as though they had been sunk by some Titanic drill when the gods were playing with the earth's crust. A few drain considerable areas of the cliff, and in time of storm many a rushing torrent loses itself in their depths. In a few instances such a reservoir has been formed directly behind a cave that was being hollowed out of the side of the cliff. As the walls of the cave gradually extended backward farther and farther into the cliff, the reservoir was sunk deeper and enlarged little by little until its bottom broke through into the back of the cave. Then the waters formerly gathered into the reservoir and held surged through the cave and lost themselves in the valley below. Every downpour of rain and every driving wind carried the work a little farther until the former roof of the cave became an arch. When the reservoir held the waters until its depth about equalled that of the cave, then the gracefully curving arch of the cave became a real bridge as in the case of the fine arch already mentioned which we have christened Pikyabo (Pee-kya-bo), the Ute name for water tank."*

**The Great Natural Bridges of Utah.*

In the same monograph Dr. Cummings thus explains the origin of Nonnezoshie and the White Canyon bridges:

"Ages ago the great sandstone beds overlying this entire region must have been pushed upwards by the internal forces of the earth until in the places of their greatest elevation the various strata separated, mountains were formed, and large cracks opened up that extended in zigzag lines away through the slopes of this vast table-land. This process of elevation was undoubtedly a gradual one; and, as the waters of the mountain sought a lower level, they took their courses through these irregular crevices, searching for the ocean which was then not far away. Their rushing currents and surging eddies wore off the sharp corners, sought out the soft places in the yielding sandstone, dug out deep caverns and recesses in the cliffs, and left behind them a series of graceful curves and fantastic forms that amaze and delight the traveler at every turn. As the formation was pushed upward from time to time, these rushing currents and surging estuaries kept on with their work of cutting, smoothing, and filing until they produced the deep box canyons so prevalent in this section, which sometimes widen out into small valleys of rich alluvial deposit, and again narrow down to mere slits between huge masses of cliffs.

"This elevation and opening of the formation often left a narrow section of the cliff extending out into the gorge for rods, around which the stream had to make its way as it rushed onward in its course. The constant surging of the waters against this barrier revealed a soft place in the sandstone, where it gradually ate out a half dome-shaped cave. In a few instances, as the water swirled around the other side of this barrier, they reached the correspondingly soft place on the opposite side and ground out a similar half dome there. When, in the course of time, the backs of these two semi-circular caves came

together, the waters found a shorter course through that opening, enlarged the archway and smoothed off and rounded into graceful curves the sides of its massive buttresses. Thus a bridge was formed and became a mighty span of enduring rock, whose foundations and graceful superstructure were laid by the ages."

CHAPTER XVII

BIRD LIFE IN UTAH

It is natural to expect that with its wonderfully diversified topography Utah has an extensive, diversified, and consequently, exceedingly interesting bird life. When it is recalled that here are plateaus, ranging from sea-level to 4,000 feet and more in altitude; mountains that tower to 12,000, 13,000 and higher; seamed with canyons, gorges, ravines, down which laughing, babbling, brawling brooks come tumbling, their banks lined with sedge, grass, bulrush, bush and tree; desert, wild, trackless, hot and tropical; alpine forests where snow lingers on mountain slopes for twelve months in the year; immense inland lakes of salt water, as well as clear mountain lakes of sparkling snow-water, where alpine and aquatic fowl love to dwell and breed, and that throughout the whole state, in valley and plain, on foothill and in canyon, on edge of forest and desert, man has made his home, planted cornfields and fruit-orchards — I say, when all these varied features are recalled, it can well be seen that it is only reasonable to expect a large and varied ornithology.

And the student is not disappointed. From my own casual observations of nearly forty years, supplemented by the careful studies of Dr. Charles G. Plummer, and several other Utah bird lovers I have gathered the material here presented. It makes no pretense of being more than a mere skimming of the surface of the subject, to lure the deeper student to fuller knowledge.

If one were to arrive in Salt Lake City at night, and

awaken about sunrise after a refreshing sleep, he would doubtless be surprised at the variety of bird songs that would greet his ears — even in the heart of the city. For Salt Lake City is unique. Its streets are wide, and even in the business heart, where there are few trees, there is waste and flush water flowing down the gutters on either side, and there are open spaces here and there where green lawns, shrubs, and trees are found. In June mornings I have heard the finnets in great numbers on buildings in Main Street, and the cheery song of the robins, and a few blocks away from the city's center, hundreds of meadow-larks, each of which, like Browning's English thrush:

> " Sings each song twice over,
> Lest you should think he cannot recapture
> That first, fine careless rapture."

A walk around the outskirts of the city will reveal orioles, flickers, red-winged blackbirds, sparrows of several varieties, juncos, screech owls, short-eared owls, sparrow-hawks, sharp shinned marsh-hawks, and western red-tailed hawks. As I listened to a glorious song from the bursting-throat of a happy linnet I recalled those beautful lines from the *Baltimore Sun:*

> " He sat on a little pulpit
> That was made of the twig of a tree,
> And he preached us the happiest sermon
> That bubbled with sunshine and glee:
> His text was the blue sky burning
> In the glory of all its sweet,
> And his theme was the beauty of heaven
> That lies at our very feet."

And what a sight it is in the warm hours of the day to see the birds taking their baths in the cool clear flowing water of the streets. Robins, sparrows, linnets, pine siskins, chipping sparrows and all, in the most joyous and

friendly of terms, for, whatever our students may tell us of the quarrelsome nature of the English sparrow, I must in honor confess that, here, I have never seen him misbehave with other birds.

I have seen more swallows in one month in Utah than I have seen in a year in California. How interesting it is to watch eave swallows build their mud-covered basket-nests, and then bring up their young. And the robins are equally unafraid. They will nest where the mother bird can be readily seen, while the male will perch nearby and make the morning hours joyous with his rich, deep-toned, mellow songs. Then the house-finch, various fly-catchers, the kingbird, the house wren and the humming bird are commonly seen, the latter darting to and fro in jeweled splendor and glory, attracting the eye as it poises, its rapidly moving wings humming in gentle monotone. I have several friends who have made friends with the humming bird, so that they have nested in the rosebushes close by the windows, where all could sit and watch them, and Dr. Plummer has made beautiful pictures of them upon their nests, feeding their young, or protecting them from the cold.

Of woodpeckers there are many varieties, including the red-shafted flicker, the downy, the red-naped and the Lewis, and the long-crested, the Woodhouse and the Rocky Mountain jays are common visitors along the foothills. The western magpie, too, is often found and it is not unusual to find well-trained caged specimens that have been taught to talk.

Nut-hatches, the pigmy, white-breasted and slender-billed, — the little brown creeper and chickadee add joy to the scene, and it is not uncommon to find the house-finches, yellow warblers and Audubon warblers all singing in concert together after they have devoured their fill of grubs, worms and insects. While there are not as many mourning-doves as there used to be in early days there are

still enough in the quieter groves and in the mouths of the canyons to fill the ears with their quiet and gentle cry. How vividly they bring to mind Joaquin Miller's exquisite and passionately human verses:

"Come, listen, O love, to the voice of the dove,
Come, harken, and hear him say:
There are many tomorrows, my love, my love,
But only one today.

. . . . . .

Now what is thy secret, serene gray dove,
Of singing so sweetly alway?
There are many tomorrows, my love, my love,
But only one today."

Oh could men and women but learn that wonderful lesson of Christ philosophy, to live today, taking no heed for the material things of tomorrow, but filling the *now* with glad, joyous and helpful service for mankind.

Along the River Jordan and in the hills one may see the white-crowned sparrow, a little larger than the ordinary sparrow, and with its tri-streaked crown of white with black on each side, which it raises like a crest when startled or surprised. Its white-barred wings also serve to identify it, though when one has once heard its song he is certain to know it again. So rich and fine is this song that the bird is often called the northern nightingale. When kindly treated he is very friendly and will nest close by, where he helps the farmer by his industry in gathering weed-seeds and insects. In some parts of Utah I am told he is quite common, and that during the winter months, while he sings in spite of the windy blasts, he will come to the open window for whatever crumbs or seeds are spread for him.

Quite as frequent is the desert horned lark. At first the uninformed casual observer might take him for a sparrow, but more careful observation reveals the tiny

black horns of feather, the black spots on the crest and breast and a streak of black on each side of his head, and the brown and white and yellow on his breast, all of which tell who he is. He is one of the most numerous of Utah's winter birds and lives almost entirely on weed-seeds during the cold season. In the spring and summer he eats quantities of insects as well. Hence he is of great value to the farmers. He swarms over the desert and down into the valleys, on the meadows and along the roadways and all over the fallow lands in company with several kinds of sparrow-like birds.

At the mouth of Cottonwood and other canyons that lie east of Salt Lake there are several glacial moraines almost entirely devoid of verdure. In December and January flocks of desert sparrows, chipping sparrows and song sparrows literally amounting to five and even ten thousand, may be seen, their rising and falling at times making them appear almost like clouds. The morning hours are simply indescribable with the rich glory of their song.

On and near the desert the desert-sparrow, the desert sage-thrasher, the owl, the vulture, the eagle and various hawks are to be found. And the butcher bird now and again must be here, for observers have seen mangled sparrows impaled on sharp twigs, awaiting the return of the killer for the remains of his feast. The sage-thrasher nests in the low-grown, scrubby greasewood, but often the fledgelings fail to come to maturity, some tragedy depriving them of their parents, and thus preventing their sweet and tender song giving joy to the wild and solitary places. The desert-thrasher is found in great numbers along the lakeshores and on the islands, and far into the deserts of eastern Nevada. Oftentimes, if one has spent the night on one of the islands or near the western shore of the Great Salt Lake, he will be awakened by a chorus

of innumerable sage-thrashers, meadow-larks and blue-birds whose song is as glorious as it is surprising.

In the fall and winter large flocks of gregarious birds may be seen flying all over the reclaimed and naturally verdant country and foothills and amongst them may often be found the gold-finch. Somewhat smaller than the English sparrow and of a soiled yellow, with little black on his head and a slightly forked tail, flying in wavy undulations, he is not hard to recognize.

Of the gregarious birds one must not forget the flocks of blackbirds which are found here all through the winter, together with the cheery and songful robin, and the meadow-lark. There is scarcely a day in the year when these interesting and delightful songsters may not be heard.

Then, too, there are many coveys of quail — the mountain quail, the California crested, and even a few imported Bob-Whites, and who that has heard their morning song of thankfulness — "God be praised, God be praised" — has not joyed in their presence. In the fall and winter, when natural food is scarce they come into the valleys and those farmers who are wise to their own farms' and orchards' benefit scatter feed for these weed-seed and insect-pest devourers.

Short-eared and screech owls are common, while barn owls are very rarely seen. Perhaps many of my readers have never dreamed of the interest one might have in watching these birds catch their prey — the rats, mice and other rodents that are so destructive to the farmer. Wearing light or straw-colored clothing, as near as possible, when night-time comes, those who wish to see the nocturnal hunters at work should go to the haystack and as noiselessly as possible find shelter, at the same time covering themselves with hay. Soon the faint "Whoo-ooh!" of the owl is heard, and then a winged shadow passes. This is mother owl, moving as silently as a moonbeam.

Then follows her mate, and a third and a fourth, but the most intently-listening ear never catches the faintest swish of a wing.

Now watch and listen, even more carefully than before. Soon there may be a slight rustle in the hay a few feet away. It is a mouse going out for food, or to make a neighborly call, but though neither he, nor you can see even the shadow of an owl in the near-by tree, the mouse is no sooner away from the hay than the owl pounces down, strikes and grabs and the poor mouse is doomed.

To some this may seem an unwise thing to teach a child, and a cruel thing for himself to observe. But I fully agree with Dr. Plummer in his idea that so long as this is Nature's plan it is as well for us to observe, study and learn rather than criticize. This is, at least, one way of ridding farms of rodent pests.

In the fir trees of the mountains there are still many dusky and ruffed grouse to be found. Sometimes they will remain quiet watching the strange visitor, and will not fly unless some startling movement or hostile act arouses them. And then with a whiz and a whir they shoot through the air and seek safety in flight and hiding.

Still fairly numerous are the wonderful sage grouse next in size and importance to the American wild turkey, which is now almost extinct. This fine species abounds on sage-brush plateaus in parts of Utah, and is probably making its last stand here and in Idaho. If Utah legislators can be made to understand that the saving of this noble species from extinction now depends practically, upon Utah, laws will promptly be passed forbidding all grouse shooting for the next twenty years.

The chickadees are also to be found in the tree-clad mountains and in the canyons to a great height. I have seen scores of them at an altitude of 8,000, and even 9,000 feet, and Dr. Plummer states that he has found them at 12,000 feet. And the cheery black-capped

little hustlers, as they run up and down the fir or pine trees, regardless of whether they are upside down or not, briskly inspecting every crevice for insect eggs or winter-hidden larvae, giving the while their striking call, " Chick-a-dee-dee-dee! " always cheer and enhearten the mountain climber.

While all parts of Utah, it will be seen, afford joy to the bird lover it is the Great Salt Lake and the islands therein that are particularly inviting in the opportunity they give for exceptional study of bird ways and manners. Dr. Plummer has spent much time in his twenty-nine years of Utah life in these haunts of the pelican, goose, swan, heron and gull and from the wealth of lore he has garnered I am permitted to cull the following.

Nearly in the center of the Great Salt Lake is an outcropping of rocks, some twenty-two acres in extent, which the neighboring inhabitants call Bird Island, but which, on the maps, is known as Hat Island, so called because of its resemblance to the sombrero of a western cowboy. Here on one occasion Dr. Plummer dwelt for eighteen days, studying and photographing the birds, and the following year he added eight more days of observations, at the same time taking moving pictures of the birds in their every-day activities. He used a large khaki umbrella blind from which he made his photographs quietly and carefully placing it where he needed it and allowing the birds to become familiar with it. He found that the pelicans were the least suspicious, that the gulls were a little more so, while the herons, ever distrustful, kept entirely away, their eyes riveted upon the opening through which he dared to look upon them and their homes.

Country Life in America, in April, 1920, published an illuminative illustrated article from the pen of Dr. Plummer about his experiences on Hat Island. He says of the pelican:

" The plumage of the pelican is mostly white. The

primaries and much of the secondaries of the wings are black. During the breeding season the crown and back of the head show very marked signs of a crest. These crest featherings are slender and thinly barbed, having a yellowish tint. I have seen the adult males, when frightened or disturbed, raise this crest to a height of two inches but usually it lies quite close to the head and neck, down which it extends in some individuals for a number of inches. These filmy, lace-like appendages ripple sometimes as though the old bird had had his crest up in curl-papers over night!

"The crest color varies with individuals. In some birds there is a marked gray mixture with the yellowish tinge. Many, but not all, of the three-quarters-grown youngsters have a decided patch of black on the top of the head, which becomes a gray-black farther down the back of the neck, and finally fades into a dull white.

" . . . In the courting and incubating season the beak and the deeply and securely rooted pouch of soft, unplumed skin pendent from the lower mandible, are as orange-yellow as the feet and legs. In the winter these parts become a pale, yellowish-green. The eyes are always yellowish."

The rookery is generally reached by the pelicans in large flocks late in March, or early in April. Prior to that time in the earlier months of the year they are to be found in the alkali swamps, the fresh-water rivers and lakes of the Great Basin, where they do their preliminary wooing and love making. It is not until mating is accomplished and the urge of nest-building comes that the rookery is aimed for. The nest is a primitive affair, yet there is a wonderful difference in pelican nests. Some are mere holes scooped out of the beds of guano-covered earth and gravel; others are beds of sticks, greasewood and shad-scale twigs, adorned with cast-off sea-gull feathers. Generally two eggs are laid, only once did Dr. Plummer find

PELICANS ON HAT ISLAND, IN GREAT SALT LAKE.

a nest containing three. When the chicks are hatched there begins the great business of feeding them. Here is Dr. Plummer's description:

"Those wary babies know about what hour father and mother are expected to arrive with their fish, so they stand expectant, at about 10:30 each morning greedily anxious for their fish dinner. It behooves those babies to be on the spot and ready, for occasionally one loses his every-twenty-four-hours' meal by not being on tiptoe for the first helping. . . .

"I was within hearing of the dinner gong for every meal served by the pelicans during the twenty-six days of my residence on the island, and yet each day the strangeness of the act impressed me so greatly that I was fascinated. The birdling always made the initial advances toward mother's beak. But if he were a tiny fellow unable to stand, the mother kindly bent far forward when he begged so coaxingly, and allowed him to apply his beak to her mandibular angle — then the way was open to her banquet chamber. The parent always regurgitated the tiny quantities of partly digested fish into the upper end of her gullet, and there the newly hatched one fed, seemingly in as much comfort as though he had been able to occupy an upright place at table. His small head often went almost out of sight into that lane-opening under the careful guidance of the old bird. Adult birds never disgorge their food onto the ground for the chicks to pick up. They are fitted with beaks so fashioned that they are unable successfully to pick things off the ground."

Occasionally the chicks get into trouble when they reach far down into the parents' "storage chamber;" as the following amusing incident in Dr. Plummer's narrative reveals:

"One day during the height of the busy season, the anxious, screaming cry of the gulls, 'Help, help, help!' sounded upon my ears. I craned my neck with the other

wild folk all around me to ascertain the cause of the outcry. Off about one hundred feet from my blind and entirely out of range of any camera I noticed quite a commotion among the birds. I leveled my glass upon the spot and made out a large number of greatly excited gulls flitting around a pelican and her chick.

"The scene was set upon a rock-floored area, rough and much broken, and an adult pelican was serving dinner to a chick that was nearly full grown. Wrestling matches between parents and their chicks after the dinner had been served were occurring every minute, so they were no particular novelty to me. But this fellow was a wonderful entertainer in his own way. He had gone down 'cellar' in the usual way, had grabbed hold of the first thing that presented itself, and started to swallow.

"Part way down his gullet the thing stopped short. The old bird shook her head terrifically and bent her back double trying to disengage herself. Strange to relate, that chick was as anxious to break away as the parent was to have him, but he was stuck, he couldn't budge!

"Locked in each other's grip those wildly flopping birds wriggled and twisted and pulled and hauled each other over the rocks, doing their best to 'git shet' of each other. The chick was powerless to tear away and the old bird could not disgorge him. In one grand final effort to free himself, for he was strangling, he let go of something, and his head came out with a snap that caused him to stagger. Pell-mell after the youngster's head, with what seemed like an earnest effort to get out, came forth a big carp! Madame Pelican's only thought was to save that carp. So she set about it in her crude way, but with great eagerness and enthusiasm. She stabbed at it with the end of her beak, and side-swiped it both ways — but the fish refused to be lifted again into that long, yellow-red lane. Her gull audience gave a merry 'Ha, ha, ha!' at her efforts to secure the prize but not one of them

YOUNG HERON, GREAT SALT LAKE.

offered to filch a morsel of it. Baby pelican, apparently overawed by the spectacle of a sedate bird cutting up such capers, gazed vacantly about him while she gave her every attention to trying to pick up what she had lost. She had traveled many weary miles with that fellow snugly tucked away in her basement cupboard and was loath to give him up. Occasionally in her efforts to rescue her prey it tumbled over toward a pair of gulls hovering near by. In a spasm of fear lest they or some other bird might seize upon it, she charged that family and all others within reach of her beak. After the struggle had gone on for about five minutes the fish chanced to fall across a low branch of greasewood. She grasped the slimy thing and tossed it into the air, intending to start it head downward into her gullet. But it dropped into her open mandibles crosswise. Again it was flung and again caught, but it landed tail first! This did not suit her so she heaved him again as high as her strength permitted — and Mr. Carp fell crosswise into his harbor again. She did her best to swallow him double, but her capacity failed her. Once more the torn and tattered carp went into the air — for by this time that fish was beginning to look much battered — and again it landed tail downward! Poor Mrs. Pelican, tail first or head first, how glad she seemed to be when that fish was safe at its last mooring! She looked about her, seemingly in wonderment, then fled unceremoniously into the air from a standing start. She made for the open sea, where I am sure she related the episode to all willing listeners."

The naturalist also tells us in this interesting story of the daily parade of the chicks to the water for their bath, of the habit of the older birds to climb to the highest ridges and there make their toilets and take observations of their surroundings, of their fishing habits, and of the indifference of the old birds to their young except at feeding time.

But in this wonderful rookery of that island there are other birds besides the pelican. The sea gull has long made it his habitat, and here he is found in vast quantities, together with the beautiful blue heron. A hundred pages would not suffice to reproduce Dr. Plummer's interesting observations on these various birds; how that the gull is a great scavenger and also a lawless devourer of the baby chicks of the cormorant, while the herons and pelicans are game-hunters and scorn any such cannibalistic dietary. The gulls are from the Pacific, where they have their winter home and they come to Salt Lake for their summer experiences. How did they find this location? What wonderful instinct sent them so far inland? The blue heron, the stately and dignified wader in our western waters, who even separates from his mate, and each goes his, her, own way, when they start out on a fishing expedition, is found here in great numbers.

There are some observers who say that fully a quarter of a million of the wild snow-geese may often be found in and near the Great Salt Lake, and the most conservative estimates place the numbers into the tens of thousands. They and all other species of goose (among which are found the cackling, the Canada goose, and black brant), are greedy grazers of the green grasses that abound in these swamps. When the grass is green and tender it is excellent food and they fatten on it, but in winter there is a different tale to tell. Dr. Plummer was tramping out in this region when he found a number of dead wild snow-geese that evidently had not been shot. He inspected the crop and gullet of each one and found them full of dead salt-grass. This was frost-bitten and dry as hay and therefore undigestible by these poor birds, for they have no teeth to chew such substances.

But, the intelligent reader may ask: Do not the geese go south in winter, where there is suitable food in abundance? As a rule they do, but conditions exist in the Salt

Lake Valley and marsh country which deceive, mislead them, even, as we have seen, to their death. Many of the swamps here are fed by warm alkali waters from the various hot springs so that they rarely freeze over. Many open places remain all winter and in them ducks, geese, coots and grebes find plenty of food for the cold months. Sometimes soft snow falls to considerable depth and fills such open areas of water with thick slush and the wild folks' food is covered up. All available green growth is away down under this blanket and it remains there until the warming influences of the sun melt the cold cover. Led by their instincts to remain by water, which, in the cold months, is their only salvation, they stand around the slush filled water-holes or fly from one point to another seeking food until they are so weakened by their efforts that they are unable to undertake a long migratory flight.

Hence one of the needs for wild-game sanctuaries. Here intelligent game-wardens can observe these conditions and provide against them, and thus save the life of the otherwise doomed birds. It is gratifying to know that upland wild life sanctuaries are rapidly multiplying in Utah. Extensive areas are being designated as bird sanctuaries, many private owners being in no way averse to the movement for the protection of wild life. The Utah laws authorize the state fish and game department to set aside areas of land for this purpose. Movements also are on foot for creating large sanctuaries for the waterfowl at the mouths of rivers that empty into the Great Salt Lake.

CHAPTER XVIII

A WESTERN PHYSICIAN-NATURALIST

Among the chief joys of my richly joyful life I count my personal associations with such great naturalists as Joseph LeConte, John Burroughs, Ernest Thompson Seton, John Muir, Charles Keeler, Olive Thorne Miller and others of the "Gilbert White of Selbourne" type. There are few enough of these men and women who really attain, not so much eminence, as who deserve eminence, by the thoroughness and completeness of their studies. Such a one it was my delight and profit to find in Salt Lake City in Dr. Charles G. Plummer. As the thrill of delight to the discoverer of a new orchid, the artist of a new type of landscape, the musician of a new theme, so came the joy and pleasure as I met Dr. Plummer, grasped his hand, and gazed into his eyes, for Nature, God's great out-of-doors, the desert, the swamp, the island, the lake, the mountains, the forest, the canyon, the loving study of beasts and birds, fishes, reptiles, men and God, have stamped their impress upon his outer man. He, surely, has taken on more of the image and likeness of God in his fine face, noble brow, expressive and tender eyes, mobile mouth, firm and resolute chin, as also in the vibrant, yet gentle, fatherly voice, than have most men. He is a wonderful compound of John Burroughs and John Muir. In the wideness and extent of his researches, in his love of solitude and trustfulness in Nature's goodness and kindness wherever he may be — on snow-clad mountain summits companioning the stars;

in deep canyon abyss wrapped around in profound silence; on trackless desert where the solitude is a physical presence to be felt; in dense forests where shadows live, move and have their being; in marshy recesses where none but wildfowl live; on secluded island where pelicans, gulls and herons mate, nest and breed — in these things he is akin to John Muir, that lover of High Sierran solitudes. Yet in his quiet and tender devotion to the smaller things of life — flowers, insects, birds and trees — close at hand, he is another John Burroughs. Whatever he does he does thoroughly, hence he is a pure scientist, beset on knowing, if conscientious observations will give knowledge to him, but saturated with the love that comes from a true realization of God's creative fatherhood over all living things — or what Howard Moore so truthfully designated "The Universal Kinship."

An added virtue in Dr. Plummer's life is that he has preserved his boyhood intact along with his strides into manhood's experiences and years, and he has allied himself to the great Boy Scout Movement. He is the beloved and revered mentor of the boys of Salt Lake City, and for many miles beyond on their hikes, rambles, outings and camp-fires. It was my good fortune to be privileged to accompany Dr. Plummer — under the leadership of Scout Executive Hammond — with about two hundred Boy Scouts of Salt Lake City and vicinity, in automobiles, on an eight hundred mile trip through southern Utah, taking in all the principal cities and towns, visiting wonderful Bryce Canyon, Zion National Park, and going down almost to the Arizona line to the interesting Mormon city of St. George. It was a wonderful and memorable trip, but one of its principal charms was the opportunity it gave of observing Dr. Plummer's relationship with the boys. He was one with them in their every mood and act. Not that he always approved of what they did. On the contrary he "hauled them over the coals" with ear-

nestness and vigor, every once in a while, but it was done in such a straightforward way that all seemed to profit and no one be "huffed" by it. Every morning, after assembly prayer, and salute to the flag had been given, a run was ordered by the scout master, and Dr. Plummer led off. At a dogtrot eight, ten, or a dozen blocks were taken, the scouts following in line. Needless to say, they all came back hungry as wolves for breakfast. Daily the doctor gave a lecture to the boys on the birds, geology, the natural laws of conservation, etc., (two others of us did the same), and he was ever ready to answer the thousand and one questions they brought to him. So beloved is he that all the scouts call him "Daddy Plummer," and on one memorable camping-trip in the Wasatch Mountains they crowned him "King of the Wasatch."

One can well imagine the influence such a man — a pure scientist, one of the leading physicians of Salt Lake City, a naturalist of the first order, a careful student, observer and lover of all Nature — has upon the boys.

He is the Muir type of naturalist, in that he believes Nature knew her own mind in all her creations. Nothing exists without divine purpose. We may not be able to discern it, but that is our misfortune or our fault, as we *seek* to know, or deliberately refuse to learn. Hence he is constantly urging upon adults, as well as youth, a more thorough and deep study of the esoteric meanings of nature. While we were in Zion National Park a fine illustration was given of his method of teaching the boys this deeper knowledge of divine law — for it is almost needless to say, he sees manifestations of the supreme mind and love in all things. One of the boys found a rattlesnake. Some wanted to kill it. Others, knowing Dr. Plummer's ideas, prevented that and called the doctor's attention to it. Picking the snake up, he brought it to me, knowing that I had made a special study of the rattler's anatomy, and for a half an hour or more I

answered the boys' questions about fangs, poison glands, how the snake made his bite and ejected the poison, etc. Then Dr. Plummer gave a brief talk in which he clearly and positively stated his belief that the Creator must have had some reason or purpose for placing the rattlesnake upon the earth, and, therefore, while he freely confessed he did not know that purpose, he saw no more reason to kill a rattler when it was out in the wilds than he did to kill any other creature. So, striding away to the foot of the cliffs half a mile away, he deposited the uninjured reptile, doubtless astonished at its remarkable and harmless adventure.

No sooner had Dr. Plummer returned from this trip than he prepared for another, in which he took a large group of Boy Scouts through the Yellowstone Park. Think of the priceless advantages such leadership gave to the boys of the party. For he is no mere dilettante in "camping out" and roughing it. It is his regular food. In a book of his, just published,* I find several passages which graphically describe his aims and methods. These are well worth quoting here:

"The way took me straight into the rich, red-golden sunset of an Indian summer day. Between me and the snow-capped skyline of the mountains lay miles of open desert leading up to the foothills all bathed just then by a gently-moving sea of deep violet-tinted atmosphere. In places where the hog-backs rose high and ridge-like, the golden brush swept them with a delicate touch from end to end, leaving them softly illumined amid the darker surrounding coloration.

"In the draws that were garbed on their northern slopes with firs, balsams, quaking-aspens and other timber the shadows were so deep that I could scarcely discern their general contour. The deeper canyons and gorges

*_Gun-Grabbing Johnny._ By C. G. Plummer, M. D., The Radiant Life Press, Pasadena, Calif.

gashing the morning face of this range were no longer visible. I knew the snow lay in them and that up toward their heads small areas of new ice coated the surfaces of the streams here and there with fairy-like roofs preparatory for the coming winter.

" I had been in the hushed seclusion of these peaks and ridges a week or so before and I knew just how everything looked with a clear white mantle draping each feature so naturally. I had tramped over those rocky slants during the winter season as well, and now, as I faced that way and caught the freshening fragrance of the desert borne to me by cool evening breezes, unwittingly I increased my pace and pressed eagerly forward.

" Those desert regions had given me untold delight as I rambled over them each month of the year. To me they were not waste places for I had found something of value in every nook and cranny I explored. It might have been simply the character of the material composing the soil, or the here-and-there patch of verdure of one species or another that attracted me.

" Rarely did I have any specific locality in view when I made such tramps, — that is, no special place to which I wished to go in a certain elapsed time — rather was I bent upon an exploration of the hidden spots that are often of such inestimable value to me and which give such great pleasure when I come upon them suddenly.

" Seemingly an aimless wanderer slowly going from one bunch of greasewood to another; to this growth of sage-brush or that bit of rabbit-brush, or to a scraggly bunch of shad-scale with its fish-scale leaves so prominently put forth, — always I found something to lure me on with an impelling urge.

" Almost every stand of bunch grass or other growth into which I peered, all eyes and ears, revealed or whispered to me some secret! In one lush bit of grass was carefully concealed the domed home of a field mouse and

four tiny occupants were left to keep house while mother and father scoured the sandy soil for food.

"Only a few days old were they, yet I am sure that these little fellows realized that I was a friend — not on killing bent! — and they suffered me to handle them as I would. Eyes that had not yet looked out upon this world were tightly sealed beneath closed lids in obedience to the Law of Nature. Tiny mouths — as yet used for nothing but to suckle the mother's breast — showed that the quickly growing germs of teeth would soon be in evidence and ready for maturing as soon as age gave them the opportunity.

"Why did I not crush the life out of these helpless creatures, so-called farmer's pests? I have but one answer to such inquiries, and that is that they are God's creatures, products of the same thought-effort as that which imaged the bird, the flower, or the man — and they have the same right to thoughtful consideration as any of these others!

"True, at some future time they become the prey of birds, mammals or reptiles, as it was designated they should be, or else they live on to a ripe old age of usefulness in their plane of existence. Such seems to be the demand of Nature and I have no right to interfere with its functioning."

Elsewhere he writes:

"Bird tracks in the sand, animal foot-prints here and there are tell-tale evidences of the coming and going of God's creatures, each solving his own problems according to his wisdom and unconsciously furnishing splendid premises upon which to base his pursuit and possible capture by enemies about which he cared little so long as he was able to secure his food and visit with his kind as his ancestors had done before him."

In this same volume he gives an ideal but essentially practical method of a genius in the study of Nature. He

draws a fascinating picture of a woman teacher and her methods:

"She loved the fields and the woods, the mountains, meadows and the babbling brooks and all of the big and little dwellers that in them homed in natural peace and comfort. She was on intimate terms with the weeds and trees, the grasses and the flowers, even of the fish that swam the turbulent mountain stream rumbling past her school-room door.

"The birds which sang from the lone places of the desert or from the branches of the trees in the neighborhood of her place of service, gave themselves freely and apparently to herself alone. Nothing in all creation was too insignificant for her most loving consideration.

"This life-long contact with the wild folk — not wild to her by any means! — had established a state of reciprocation rarely observed in human beings. Of whatever she was possessed she gave abundantly, whether to the small boy with the stubbed toe, to the sweet singing bird near her, or to the down-hearted girl, and always she was rewarded in proportion to that which she expended.

" . . . She instilled into the eager receptive minds of her girls and boys the natural laws of the universe. She led them by the invisible linked-leash of tolerance, understanding, sympathy and love. Each one was directed how to be himself all the time."

Dr. Plummer then gives examples — which he himself saw, for he claims his model teacher is a reality — of how this woman conducted her classes in school and outside. She taught and led by suggestion and the discipline of the powers of observation. In this regard Dr. Plummer's presentation is not second to that which Professor Lane Cooper gives of the great Agassiz, whose three principles of education might be said to have been, (1) observation, (2) more observation, (3) continued observation.

SEA-GULLS ON HAT ISLAND IN GREAT SALT LAKE.

And she evidently had taken for her motto, consciously or unconsciously, the words of Liberty H. Bailey:

"If one is to be happy he must live in sympathy with common things. He must live in harmony with his environment. He cannot be happy yonder nor tomorrow; he is happy here and now or never. Our stock of knowledge of common things should be great. Few of us can travel. We must know the things at home."

In the chapter on the "Birds of Utah," I have referred to Dr. Plummer's exhaustive studies of wild fowl on Hat Island. He has written a most fascinating book upon the subject which it is hoped will shortly be published.

He is also a poet. His lines on the well-known and famous "Sea Gull Monument," as well as a poem on "The Boastful Daffodil" are well worthy of preservation.

TO THE MEMORY OF THE SEA-GULLS

DEDICATED TO MAHONRI M. YOUNG.
SCULPTOR

"O bird of snow-white plume and graceful poise, thou art
Immortalized in gilded, everlasting bronze!
On spreading pinions, held aloft by globe and shaft
Of stone, o'er pedestal of granite ages old.
Thy service told in tablets is a tale of life.
Thou cam'st a seeming messenger of God, to save
From famine, dire, men, women, little children, too,
Who journeyed far to make their home in deserts wild.
As long as time endures, thy praises will be sung!
Thy form in sculptured bronze shall always rev'renced be.
And pioneers will tell to those who follow them,
That God was good, — He sent thee from the unknown waste."

THE BOASTFUL DAFFODIL

"Once a daffodil so proud
Shook his head and laughed so loud,
That a violet near by
Was afraid, she was so shy.

"For the daffodil had said,
As he tossed his yellow head,
'God's great sun of yellow gold
Paints for me my color bold.
With the great transcendent light
I, alone, am thus made bright.
Spring's warm zephyrs do not blow
On the humble and the low.'

"But the violet so shy
Oft had looked upon the sky!
And she humbly raised her head
From its dainty purple bed;
Looked again upon the sky,
Saw God's face — ne'er wondered why
She was scorned in life's keen race,
When she saw Him face to face.

"Still she sheds her odors sweet,
Blooming at the Master's feet."

CHAPTER XIX

UTAH'S INFLUENCE UPON LITERATURE

This chapter makes no pretense to completeness. It is merely designed to give to the general reader a glimpse into what, to most people, is an unknown field. While I was in Salt Lake City, writing a part of this book, the historian of the Mormon Church freely opened their large library, both of books, manuscripts and letters, to me, and gave me unrestricted use of them for several weeks. One whole section was devoted to Anti-Mormon Works, scores, hundreds of them; another section was devoted to generally favorable literature, while the rest was given up to the works of their own people. It was the first time in my not small or limited experience that I was given access to everything that could be found *against* the faith and people of those about whom I was writing, and I believe this attitude of frankness fairly represents the position taken by all intelligent Mormons of today in regard to their faith and mode of life.

The polemic part of this literature I am not particularly interested in, though I carefully read everything I could find that came from the pen of Joseph Smith, the Mormon Prophet. But there were many other books that are entitled to be called literature, full of delightful and charming descriptions, that should be better known.

Foremost among these are such books as Stansbury's *Exploration and Survey of the Valley of the Great Salt Lake of Utah in 1849*. This was printed by order of Congress and issued in 1853. It is illustrated with a

number of toned lithographs, neither very artistic nor accurate, still useful as giving an idea of the conditions at that early date. It contains nine chapters, the first four of which are devoted to the journey from Fort Leavenworth to Salt Lake City. As the expedition was joined by a band of emigrants going to California, and they traveled with the surveyors as far as Salt Lake City, these chapters are enlivened with incidents that otherwise might not have occurred. Chapter V is devoted to a reconnaissance to Fort Hall and return, and Chapter VI to the western shores of the Great Salt Lake. Then, as winter came, and further survey work was impossible, the party spent the winter in Salt Lake City, and Chapter VII is devoted to a brief history of Mormonism and a relation of the writer's impressions of the Mormons themselves. This is both interesting and instructive, as Stansbury and his party were kindly disposed to those who had treated them with consideration and respect.

The most important chapter of the book is Chapter VIII which gives the report of the complete survey of the lake; while later surveys have made a few slight corrections and additions, this is practically the basis of our knowledge of the lake and is still quoted as the chief and prime authority. Chapter IX relates the story of the return of the expedition to Fort Leavenworth with railroad and other suggestions.

In 1859, Captain J. H. Simpson, under the authority of the Secretary of War, made an exploration, and this was published in 1876, as a government document. It is entitled *Report of Explorations Across the Great Basin of the Territory of Utah for a Direct Wagon Route from Camp Floyd to Genoa, in Carson Valley.*

Camp Floyd was afterwards changed to Fort Crittenden, and was located in Cedar Valley, in what is now Utah county. Simpson was an expert explorer and had done work of this kind before for the government, hence

his report is an elaborate quarto of nearly 500 pages. He gives an historical introduction which tells, with fair accuracy and fullness, of the several prior explorations, beginning with that of Padre Escalante, the Franciscan Friar, who desired to find a way from Santa Fe to the new missions in California. He succeeded, however, in reaching no further than Oraibi, one of the Hopi villages.

He then discusses the claim made that Jim Bridger, the pioneer trapper, was the discoverer of the Great Salt Lake. The discussion is interesting though it is difficult to decide when the evidence is neither complete nor convincing. While there are many pages of dry scientific data, the reader who loves to browse will find many fascinating lines and pages in Simpson's volume.

In the same year, 1859, Major Macomb of the Topographical Engineers, accompanied by Dr. J. S. Newberry, the geologist, made a *Report of the Exploring Expedition from Santa Fe, New Mexico, to the Junction of the Green and Grand Rivers of the Great Colorado of the West,* which was issued by the government in 1876. I have quoted in one or two places from this volume, and it being one of the first accounts of careful explorations in the wonderful region of south-eastern Utah it is entitled to a careful perusal.

In both the Wheeler and Hayden geological surveys Utah has no inconspicuous place and to the geologist these early volumes are priceless. But it was not until Major J. W. Powell was made the head of the United States Geological Survey that Utah came into its own, as far as scientific study was concerned.

In quick succession four important monographs were issued. The first of these was by Powell himself, entitled, *The Geology of the Uinta Mountains,* in which he showed that the formations of the region have an aggregate thickness of 50,000 feet, and that they marvellously illustrate, on a grand scale, facts of displacement, degradation and

sedimentation. No romance is more startling than the facts of geology he here discovered and to the superior reader and student, even though he be not a technical geologist, these pages are full of fascination.

Equally attractive, though in an entirely different way, is Grove Karl Gilbert's *Report on the Geology of the Henry Mountains.* Here we are treated to a study and explanation of the peculiar volcanic intrusions, which Gilbert terms "laccolites," and which are found not only here but across the Grand Canyon as far south as the region near Laguna, New Mexico.

Next came, in 1879, Powell's *Lands of the Arid Region,* already quoted from and referred to in the chapter on irrigation.

Then, in 1880, was published Dutton's *Geology of the High Plateaus of Utah.* This latter is a comprehensive work and full of Dutton's prose-poems of description. No intelligent student of the geological history of Utah but will be delighted beyond measure with this volume.

In the chapters entitled "Glimpses of the Land," "Geology," and "Zion National Park" are extensive quotations from the pen of Dutton. These are taken from scientific monographs as the one here named and yet, few writers of descriptive power, recognized as among the masters of literature, have given to the world such exquisite and perfect pen pictures as he. Dutton was a captain of artillery, with a strong geological bent of mind, and Powell, with that keen judgment of his as to the capacities of men seized him, made a friend of him, and sent him to study the rock formations that had so dazzled and delighted him in his studies of Utah.

Neither man knew exactly what the results of their work, and that of their compeers, were to be. Powell had already made his memorable trip down the Canyons of the Colorado, and had published the report of it. Dutton was now persuaded to make a thorough study of the Canyon

Country, and soon there came from his pen that graphic scientific monograph: *The Physical Geology of the Grand Canyon District,* which appeared in the Second Annual Report of the United States Geological Survey, later followed by the fascinating volume: *The Tertiary History of the Grand Canyon District;* with accounts of Mount Taylor and the Zuni Plateau, Hawaiian Volcanoes, etc.

Some years later Powell himself wrote his masterpiece of description: *The Canyons of the Colorado,* which deals largely with Utah, but the work was published as a subscription book, in a limited edition, and few copies are now to be found. It is my hope that some day this most attractive work may be republished at a price that will enable the many to purchase it.

Naturally, the Great Salt Lake has greatly attracted students of geology, and G. K. Gilbert has given to us an exhaustive quarto volume entitled: *Lake Bonneville,* this being the first of the separate monographs of the United States Geological Survey. It was issued in 1890 and is now quite scarce. Lake Bonneville is the name given by the scientists to the prehistoric lake, of which Salt Lake is but the small remnant, and the various shore-lines of which are to be seen on the foothills of the Oquirrh and Wasatch ranges.

Several other scientific monographs and books have been published on Utah, several of which are elsewhere quoted from in these pages.

Two of the most noted books, written by disinterested travelers, who were attracted to Utah by the reports of the peculiar tenets of Mormons are *A Journey to Great Salt Lake City,* by Jules Remy and Julius Brenchley, published by W. Jeffs, London, in 1861, and *The City of the Saints,* by Robert F. Burton, published by Harper and Brothers, New York, in 1862.

The former of these is a pretentious work, finely printed in large type, illustrated, and in two volumes. Its

chief author, Remy, was a cultured Frenchman, who, with his companion, came from California to Utah. He writes with philosophical candor, and without any of the vindictive prejudice so often found, giving his views of Mormonism and its leaders in a calm and dispassionate manner, criticising without venom, and praising without fear.

Equally free from prejudice is Burton's far more elaborate and exhaustive work, though it is crowded into one volume. But, though the type is large and clear, its pages are large, and there are nearly 600 of them. He writes, however, with a freedom and power possible only to a man of clear thought, strong opinions and simplicity of expression, and as one reads, he feels that here are knowledge, sympathy and understanding as well as criticism and censure.

For sane, calm, unbiased accounts and judgments these two books can well be read and enjoyed.

In 1866 there was printed and published in San Francisco a slender volume, daintily gotten up, with nothing but the one word *Poems* on the cover. Inside, the title page revealed that the authoress was Sarah E. Carmichael, and the introduction that the volume was issued by friends. These in reality were the officers of Fort Douglas, and in it they thus express themselves:

"It will hardly be deemed a matter of local prejudice merely, that this friendly alliance dotes upon the fact that so gifted a child of song has been vouchsafed to the remote and obscure region of country known as the Valley of the Great Salt Lake. It is indeed regarded by them as worthy of more than ordinary note, that in such a secluded spot — shut out from the world at large by the frowning barriers of the Rocky Mountains, without the advantages of books and intellectual training; without the soul-expanding influences of a cultivated and liberal public sentiment; away from the softer elements of natural beauty, and having nothing but her own heart to commune

with — her songs have taken so wide and glorious a flight; ever loyal to truth and humanity, ever sweet and melodious as the voice of nature."

It is a great regret that I cannot quote several poems from this choice little selection. Many of them are poems of the war, and her threnody on the death of Lincoln is, without question, fit to rank with Whitman's "My Captain" in true pathos and deep toned sympathy.

An incorrect version of her "Stolen Sunbeam" was yet deemed so perfect a poem that Bryant included it in his *Centenary of American Song.* It is to be hoped that some enterprising publisher, will, ere long, see it the part of good business policy to republish this little volume, for it cannot fail to give great pleasure to those who are fortunate enough to secure a copy.

One of the books that all those interested in Utah and the Mormons should read is A. B. Carlton's *Wonderland of the Wild West.* Mr. Carlton was chairman of the United States Commission appointed by the President to see that the anti-polygamy laws of Congress were carried out in Utah. He was an Indiana lawyer and spent six years on the work of this Commission. Needless to say he was an anti-Mormon. The book is sketchy, and by no means literature, but there are several things that commend it. There is an honesty of purpose and a spirit of fairness manifested together with a determination to carry out the law against polygamy. Now and then there are fine descriptive touches, some of which are well worth quoting. Historically matters are presented by one who had time to study the subject thoroughly, and while the author started into his work prejudiced against the Mormons he succeeded in showing us that before long, after his arrival in Utah, his ideas underwent many changes.

Harry L. A. Culmer, to whom attention has been called in the chapter on artists, would have been equally famous in literature had he chosen to devote himself to it. In

that chapter quotations are given from an article written by him on "Mountain Art" that show decided literary ability. Elsewhere fugitive pages from his pen are found. In *Tullidge's Quarterly Magazine,* January, 1881, is an article entitled "Our Adventure in the Wasatch Mountains," which shows the power of his imagination and the dramatic skill with which he was enabled to present his visionings as well as his joy in the scenery of this glorious range. The story tells how he and a young artist friend were caught in a storm and in trying to find their way to shelter came upon a charcoal-burning hermit, who in his anger and rage at seeing them, fell into an epileptic fit. On his recovery, feeling that death was rapidly approaching him, the hermit told the thrilling and sad story of his life. It is in the telling of this romantic history that Culmer displays his power.

In 1880, Edward W. Tullidge started the publication of a quarterly magazine, which existed for two years. It was a part of the so-called "reform" movement against certain phases of Mormonism. There are many interesting as well as instructive historical pages in each issue of this magazine, and though antagonistic, in some respects, to certain claims of the Mormon leaders, it gives fair and even laudatory sketches of them and their work.

It can well be imagined that the great variety of yarns told by those who had passed through Utah and had come in contact with the Mormons, and especially after Brigham Young's successful harassment of the federal forces in 1858, the promulgation of the polygamy revelation, and the Mountain Meadow massacre, would necessarily let loose a flood of stories, dramas, novels, filled with the wildest stretches of imagination of which the human mind is capable. Joaquin Miller, the Poet of the Sierras, wrote his *Danites,* under the impulse of this flood of hatred turned against the Mormons, but in after years he always regretted it, and again and again has said to me

OLD WHITE HOUSE, FIRST RESIDENCE OF BRIGHAM YOUNG, SALT LAKE CITY.

that it was the first and only time he ever allowed his mind to be swept away by a popular clamor against anyone.

Captain Marryat, in his *Monsieur Violet,* was led off into pages of tirade against the Mormons. Denouncing Joseph Smith formed a dramatic episode in his book.

Geraldine Bonner, in her *Tomorrow's Tangle,* introduces a dramatic situation based upon the possibility of one of her characters having been a Mormon with more than one wife, and Harry Leon Wilson, the genial author of the *Red Gap* stories, before he had struck that most interesting and popular gait, wrote a book which supposedly told the truth about the Mormons. The title was suggestive of Brigham Young and his associates: *The Lion of the Lord.* The book is well written of course, but its *facts* are largely a rehash of John Doyle Lee's *Confessions.* In his introduction, Wilson thus speaks of the secret vengeances of the Church, of the "Danites" and the power they had over the timid souls of the Mormons:

"There are others still living in a certain valley of the mountains who will know why the soul-proud youth came to bend under invisible burdens, and why he feared, as an angel of vengeance, that early cow-boy with the yellow hair, who came singing down from the high divide into Amalon where a girl was waiting in her dream of a single love; others who, to this day, will do no more than whisper with averted faces of the crime that brought a curse upon the land; who still live in terror of shapes that shuffle furtively behind them, fumbling sometimes at their shoulders with weak hands, striving ever to come in front and turn upon them."

Even Conan Doyle had to take his fling at the Mormons in his *Study in Scarlet,* and it certainly is not to the credit of a truly great author that he was stampeded into accepting accusations of horrible crimes against the Mormon leaders as proven facts. Listen:

"The victims of persecution (the Mormons) had now turned persecutors on their own account, and persecutors of the most terrible description. Not the inquisition of Seville, nor the German Vehmgericht, nor the secret societies of Italy were ever able to put a more formidable machinery in motion than that which cast a cloud over the Territory of Utah.

"Its invisibility, and the mystery which was attached to it, made this orgaziation doubly terrible. It appeared to be omniscient and omnipotent, and yet was neither seen nor heard. *The man who held out against the Church vanished away,* and none knew whither he had gone or what had befallen him. His wife and children awaited him at home, but no father had ever returned to tell them how he had fared at the hand of his secret judges. *A rash word or a hasty act was followed by annihilation,* and yet none knew what the nature might be of this terrible power which was suspended over them. No wonder that men went about in fear and trembling, and that even in the heart of the wilderness they dared not whisper the doubts which oppressed them."

In this story John Ferrier is "required" to give his adopted daughter in marriage to a Mormon. Brigham Young himself comes to "advise" or "counsel" the refractory father. After due consideration he refuses, as she has chosen someone else, who is a Gentile. Then, with dramatic power, the great writer, page after page, enlarges the stealthy terror of the powers of vengeance, until Ferrier, his daughter and her lover escape from Utah. They are pursued by "The Avenging Angels." Ferrier slain, Lucy captured, taken back to Salt Lake City and there compulsorily married to the Mormon youth who desired her. Her lover discovered the fact, and thereafter pledged his life to vengeance, and the remaining portion of the volume is devoted to telling how he sought and ultimately found it. Of course the subject is

a dramatic one, but to my mind it is a monstrously cruel thing to load upon any people the burden of such accusations, unless they can be proven by incontrovertible evidence.

Zane Grey has taken a somewhat similar attitude towards certain phases of Mormonism in his novels, *Riders of the Purple Sage,* and *The Rainbow Trail,* but he has enriched his volume with many wonderfully poetic, dramatic and graphic descriptions of the little known country of southeastern Utah. Even Charles Felton Pidgin, as late as 1912, twenty-two years after President Wilford Woodruff had announced the abandonment of polygamy, felt called upon to write *The House of Shame,* a novel," in which is told a story of love and marriage, — not the marriage preceded by days of loving courtship, the ring and the kiss, and the congratulations of relatives and friends, but the mating that takes place in the great American House of Shame, — the Mormon Church."

There have been secessions from the Mormon Church for one reason or other. The Reorganized Church of Latter-day Saints practically separated from the present Mormon Church on account of polygamy, and they have issued much polemic literature upon the subject. One of their members, Paula Brown, wrote a novel, *The Mormon Girl,* showing the horrors of polygamy and using the "Danites" with dramatic effect.

Another secession was that of James Jesse Strang, who called himself "King of the Mormons," and located on Beaver Island, in northern Lake Michigan, so I gather from a remarkably interesting novel written by James Oliver Curwood. This book was published in 1908 by Bobbs Merrill Company, and is entitled *The Courage of Captain Plum,* and is but another of the stories that have helped befog and confuse the public mind.

There is another class of writing that is too important in its pernicious influence to be overlooked. This includes

the works of psychologists and others to account for Joseph Smith. One of the leaders in this class is *The Founder of Mormonism,* by L. Woodbridge Riley. Some of the materials of the book were utilized in 1898 for a Master of Arts thesis on the *Metaphysics of Mormonism,* and it was enlarged and presented to Yale University — as a thesis for the degree of Doctor of Philosophy. In it the author proceeds, in a *supposed* strictly scientific method, to analyze Joseph's ancestry, the dreams of his father and mother, and their relation to the visions of Joseph himself. A chapter is devoted to his environments and visions, and the latter according to the author, are "largely explained by the influences of suggestion and hypnotism."

The "value" of this kind of absurd speculative writing may be understood when I call attention to the fact that Mr. Riley's publishers, The Putnams' Sons, have repudiated his articles on "Christian Science," and "Mormonism," which appeared in the last volume of the Cambridge *History of American Literature* series, have called in the copies of the book already issued, suppressed the remainder of the edition, and promised a new issue with fair and truthful articles replacing Riley's fantastic absurdities.

Another remarkable book that, however, can scarcely be said to be solely a product of Mormon polygamy is William Hepworth Dixon's *Spiritual Wives,* in the two volumes of which he gives a graphic and comprehensive account of the almost simultaneous promulgation of the doctrine in Germany, England, New England and Utah.

One of the charming writers of our day is Florence A. Merriam (Bailey) whose books on birds and bird lore are enjoyed wherever birds are loved. In 1904 she published *My Summer in a Mormon Village.* It is full of exquisite and delicate cameos of description of the Great Salt Lake, the birds, the people with whom she met, and especially of one dear old English grandma, who with her husband

had embraced Mormonism in an early day, had left comfort and luxury behind, and joined the pioneers.

"It was like reading a page of history to hear her tell about crossing the plains. . . . Their company was a wealthy one of fifty teams and they had a merry time in crossing the plains. Even after traveling all day they were not too tired to dance at night. 'We had splendid singers in our band,' grandma said with a smile of pleasure at the memory of those days. But it was not all brightness. They met with one of the tragedies so common in pioneer life — their oxen stampeded and killed a number of women and children. Grandma pressed her own children thankfully to her heart, and the mourners buried their dead on the lonely plain and went on their way.

" . . . She liked to remember the voyage over. 'I love the sea,' she exclaimed, with a noble light in her eyes. 'We had a terrible storm but no Latter-day Saint was ever lost at sea, which shows that we were guided and blest — doesn't it?' she confused me by asking, in her sweet straight-forward way."

One of the valuable historic records of the days prior to the building of the Union and Central Pacific railways is *The Great Salt Lake Trail* by those two western pioneers, Colonels Henry Inman, and William F. Cody. It is the story of thrilling days and nights of stress, storm, danger and death. All the pioneers who helped blaze this trail from civilization into the heart of the desert are recalled in glowing periods and the narrative is exciting throughout.

Of all the books written by Mormons who abjured their early belief perhaps the best, and the one written with the least animus is T. H. B. Stenhouse's, *The Rocky Mountain Saints*. Naturally it criticises both the belief and the leaders of the Church of his time, but there seems to be no dishonest, unfair or vindictive spirit shown. His

wife's book, however, *Tell It All,* is full throughout of a bitter spirit against polygamy and she condemns the system and those who introduced it in no unmeasured terms.

A noted woman in California literature should, in justice, be accredited to Utah, for this was her birthplace. I refer to Ninetta Eames Payne, long of Glen Ellen, but now of Berkeley, California. As H. A. Crittenden, a well-known New York journalist, wrote of her:

"She is a writer whose fine enthusiasm and inimitable descriptive style have done more than any other individual agency to make the natural attractions of California and the West better known. . . . Her prose contributions . . . are of the very essence of poetry. They have caught and embalmed the hum of the bees, the voices of the birds, the bronzed glintings of the hillsides, the mad exuberance of the flowers, the soothing influence of the manzanitas, and the religious inspirations of the sequoia forests. The minuteness, the lovingness, the fidelity with which she lingers over these themes entitle her to be called the Thoreau of her day and of the Pacific Coast."

She and Culmer, the artist, were life-long friends, and it was owing to this friendship that the world owes Culmer's paintings of the cypresses at Monterey, and the various allurements of the Yosemite. Several articles that Mrs. Payne wrote were illustrated by Culmer.

One of her most distinctive Utah articles appeared in *Outing,* for March, 1897, and is entitled "Cruising Among the Salt Lake Islands." After recounting some of the wild, weird and startling traditions prevalent in her childhood days about the lake, she says:

"To spend even days, to say nothing of weeks, within sight of the Great Salt Lake, is to become possessed with an ardent longing to set foot on the mysterious peaky islands far out on its dazzling plain. At no hour is one indifferent to their allurement and beauty. In the

crystal mornings, through the burnished network of midsummer noons, and in the unspeakable grandeur of the sunsets, the picturesqueness and seeming inaccessibility of these isolated points, irresistibly appeal to the imagination."

The boat she went on was the *Cambria,* of the English model of catamaran, in order to float on the shallow waters and also bear the astonishing weight of the waves.

"By middle June and on through July and August, the lake is at its best. A fine breeze is usually to be counted on in the early morning, and late in the afternoon it blows up lively again, making a sail at sunset a delight.

"Three mountain chains cross the lake bed, and are easily traceable by the distinct groups of islands that mark their course. Antelope and Fremont are in a line with Promonitory Point, which shows the northward connection with the Oquirrhs; the Aqui peaks leave Stansbury, Egg, Carrington, and Hat Islands in their wake, and further to the west — dimly outlined in the ineffable blending of sea and horizon, the Desert Range lifts a trio of bold heads, Strong's Knob, Gunnison and Dolphin.

"Of these islands, Antelope is the best known . . . It has an average width of four miles, and its highest point is 3,000 feet above the lake, and 7,200 feet above sea level. There is little diversity in the topography of the eastern coast, but a look at the west side from the stony ledge of Pilot's Peak discovers troops of chimneyed rocks stepping out boldly into the wrinkled shoals and back of them the dizzy mountain front is gutted and cloven into monstrous shapes by the erosions of storms and sea.

"From Monument Ridge, the highest elevation of the island . . . the view is stupendously grand, yet desolate beyond words. The awful aloofness of the distant mountains and islands, their profound isolation from human interests, were an enchantment as well as a weight

to the spirit. Indeed, I had never beheld a scene that impressed me so strongly with its utter loneliness. This may have been due in part to a stillness that was devotional and the total absence of life, save a solitary wild duck floating on the rippleless arc of White Rock Bay. The whitened mass piled fantastically off shore gives the bay its name and adds an effective dash to the uniform shades of lake and sky, and the stern rock-casing of the island.

"Westward and north the immensity of the sun-hot blue, sown with islands, spread away and away to the glare of the desert and the cloud-mixed summits of the terrace chain. White Rock seemed hardly a stone's throw off, and beyond it rose Carrington's notched circle, with its single culminating peak, and farther still, where the eye lingers longest, was that group of bleached limestone cliffs — wan specters of islands upthrust in dun sea spaces — Strong's Knob, Gunnison, and Dolphin, whose infinite sequestration is the despair of lovers of the uniquely picturesque. The twin domes of Stansbury were loftily defined against the faint snow-line of the Tuilla Range, and Fremont, standing boldly apart off the grim obtrusion of Monument Ridge, was yet near enough for us to distinguish the twisted formation that makes it sometimes called 'Castle Island.'

"Directly across from the north face of Fremont, Promontory Point juts into the lake, and is one of the most striking features of the mainland. On the north and east, the eye can trace gigantic gaps in the blue and white of the Wasatch, where the three rivers — Bear, Weber and Jordan* — force their way to the Great Basin, and thence lakeward through green marsh borders. This constant influx of fresh streams makes no perceptible decrease in the saltness of the waters.

*Mrs. Payne is in error here. The Jordan River does not force its way to the Great Basin. It is a short stream connecting Utah Lake with Salt Lake.

"A noticeable feature of the Great Salt Lake is that the wind here has none of the salt freshness of the ocean, but rather the warmth and electric dryness that belong to desert regions. The extreme dimensions of the lake are about eighty miles in length, and fifty in width, and its greatest depth does not exceed sixty feet. Some conception may be had of its altitude when one reflects that its surface is higher, above sea level, than the average height of the Alleghany Mountains.

" . . . Contrary to supposition, there are living things in this 'Dead Sea of America,' minute, it is true, but multitudinous in number, though few in species. The sole representative of the vegetable kingdom is an *alga,* green and soft as plush and the size of a buckshot. This globular seaweed aggregates and floats in ragged mats on the surface. It is the food of innumerable small winged shrimps peculiar to this water. In July the larvae of millions of tiny flies are attached to the algae — the shrimps, the black oat-shaped worms and the flies constituting all the animal life found in the lake."

It is a regret that I cannot include here Mrs. Payne's graphic and thrilling description of a dark and starless night, suddenly illuminated by a brilliant moon, and finally lost in a wondrous dawn, with which she concludes her sketch.

Among the citizens of Utah of today I find the literary spirit in active evidence. One man in particular, Albert Whipple Hadley, though born in 1879 in Minnesota, and a world-wide traveler, came to Utah in 1900, and ever since has kept returning to his first love. He now resides in Ogden. His specialty, strange to say, is Egyptology, and he has the proud record of being the only man to secure photographs of the secret upper chambers of the great pyramid, as well as the lower passage and chambers of the second and third pyramids. He firmly believes that Khnem-Ba-Khuf was the real and original builder of

the great pyramid and that Cheops came later and endeavored to "obliterate" his predecessor and then claim that the pyramid was his. He makes out an exceedingly strong case.

Mr. Hadley has written many poems, most of them locally published, from which I select the following:

The CEDAR TREE'S LOVE

"You, Oh Cryptomeria grand,
Were a sapling straight and tall,
And I but a seedling with the ferns,
Growing beside the wall.
I watched you towering there above
All bathed in sunlight's glow,
And envied the other trees about,
And worshipped you here below.

"You seemed to notice me now and then,
So I flourished in anxious fear,
Lest you might favor the stately pine
That trembling, stood so near.
She drooped and died when you turned your head,
And I'd gained your love I know,
For I felt your strong roots clasping mine
Deep in the soil below.

"And on through the drifting years you told
Me tales of the world above,
While I told you of the things of earth
And dwelt in a realm of love.
Dim centuries hence when you've grown old,
And I am gnarled and dead,
You'll feel my roots still pressing yours
As the days when we were wed.

"When the night-bird's call to its ghostly mate
Is echoed across the glen,
You'll think of the sighs that we exchanged,
Alone in the tangled fen.
Ah, Cryptomeria — loved one, mine,
Though centuries come and go,
You'll cherish a thought for the cedar tree
That loved you here below."

Just before going to press I have received from Mr. Hadley an interesting collection of his poems, entitled *Hadley's Mormon Rhymes, by a Non-Mormon,* which is well worth careful perusal.

CHAPTER XX

THE ARTISTS AND SCULPTORS OF UTAH

It may truthfully be said that fifty years ago there was little real American art. The art of Paris, London and Italy dominated the thought and expression of our American painters, because the foreign standards had formed the tastes and therefore controlled the pocketbooks of their patrons. It has ever been hard for the human mind to break away from tradition, and it is not in the power of every one who desires freedom to win it. Desire, will, longing, may go a long way towards freedom, but only when these are combined with genius in expression are prejudices overcome, new standards justified, and the victory gained.

The West has borne a large part in achieving this freedom for American art. Such men as Albert Bierstadt, Thomas Moran, Harry L. A. Culmer, Thomas Hill, William Keith, Julian Rix, and Chris Jorgensen have won for themselves honest fame not only in *spite* of their deviation from European standards but *because* of their spontaneous, natural and truthful presentation of the landscapes that they loved, which were American — purely western. Any attempt to present them in other than distinctly western fashion, that is, with a free, untrammeled hand, would have been affected and untrue.

One of the daring artists who was impelled by the honesty of his own nature to become a purely western artist was Utah's honored son, Harry L. A. Culmer, of Salt Lake City. Born in Kent, England, March 25, 1854, his

Monument Park, in Southeastern Utah

From a painting by H. L. A. Culmer. In the author's private collection

H.L. A. Kulmer

parents removed to Utah when he was yet a small lad. As a boy he longed to be a painter, yet the demands of a life of poverty allowed him to give only his Sundays and holidays to the carrying out of his heart's desire. Yet such was his natural ability that he early attracted the attention of the artists of Salt Lake City, principally of Alfred Lambourne to whom he was indebted for long-continued and most generous assistance. At intervals he worked under masters in California and New York; but his studies under the tutelage of others were brief, and his training and the success he achieved were mainly the result of his own genius and a never-failing energy in seeking to express it.

To the outward world Mr. Culmer was a business man, being intimately connected with several important enterprises of Utah. Only to his friends, and in his leisure hours, was he the masterly artist, and not until four years prior to his death did he feel justified in casting aside business cares and responsibilities and devoting himself altogether to his beloved art. He painted both in oils and water colors, and it is a question not easily settled, among critics, in which medium his genius the better expressed itself. Those who have his vivid water colors of the Red Rock Country, the Vermillion Cliffs, the Monument Park Region, and the Colossal Bridges of southeastern Utah, claim that in these the artist was at his best; while those who rejoice in the possession of his occasional oils of those regions, or of canvases of the exquisite lakes of the Uinta and Wasatch ranges, the Tetons in Wyoming, the Cypresses of Monterey, etc., are convinced of his super-excellence in this medium.

In his desire for art culture and expression Culmer was not satisfied with a narrow and limited outlook. He was a voracious and yet careful reader — a student, indeed not only of art, but of philosophy, science and life. Though, as we say, self-educated, he was *highly* educated, for he

was far more deeply, really and intelligently in converse with the great minds of the ages than many who had taken university degrees.

The breadth of his reading and studies led to the formulation of high personal ideals both of life and art. He was an ideal citizen. He performed the duties inherent in citizenship with a faithfulness and interest highly to be commended to those who ignore such responsibilities. He gave largely of his time and talents to the furtherance of all plans for the benefit of his city and state, and few men in Utah, therefore, were ever more honored or beloved.

His pictures, too, clearly show this deep and real culture. There are no mistakes in them of anatomy, botany, dendrology and geology any more than of the fundamental principles of perspective, drawing, shading, etc. Such of his pictures as "The Mystery of the Desert," and "The Temple of Om" both of which are in the lobby of the Hotel Utah, clearly reveal his profound knowledge of geology and the deep significance it possesses in the understanding of such scenes as those portrayed. One feels, as he looks at these canvases, the countless ages required to create such mysterious desert areas, or to deposit under the seas, uplift, and then carve, with the almost imperceptible showers of nature's winds and rains, storms and sunshines, the glorious towers, temples, pinnacles, minarets, cliffs, bridges and buttresses which abound in the state of his home and affection, and which he so much loved to paint.

That he was no mere copyist either of the master artists he admired, or of the nature he loved, is demonstrated by both his pictures and his words. Now and again he wrote of his conceptions. In one of his articles entitled "Mountain Art," he daringly and justly criticises a few of our great American painters, and shows wherein they failed in some of their productions. He clearly shows

that the treatment of a subject is not wholly a consideration of truth, but is largely a matter of choice. He says:

"The question is whether an artist should narrow his vision to seeing but one side of nature, or whether he should go out doors with his eyes wide open, — seeing all, daring all; sometimes failing ignominiously, but making a success, now and then, which sheds luster upon all art, and which he could not have accomplished if he had lacked the nerve to break away from tradition and foreign influence."

Then he pleads with American artists for a fuller and more comprehensive treatment of American mountains. He traces the development of true landscape painting from the days of Titian and Tintoretto, through the wild vagaries yet undoubted genius of Salvator Rosa, the truthful beauties of Claude Lorraine, to the masters of the English and German schools. He then shows wherein American critics have injured American art by their attitude towards the master mountain-painters, and compares these giants of the brush with those who "abide by the edge of the wood, where they work over and over again the material that ten thousand other painters have worked in during the past hundred years."

Finally, with a sweep of eloquence inspired by his beloved Utah mountains, he declares:

"That which lifts itself above the level is the mountain-painter's subject-matter, the aspiring, the exalted, the lofty. The dwelling-place of Jove is on the summit of Olympus, — God's place is on high. He delivered the laws to Moses on Mount Sinai. 'How beautiful upon the mountains are the feet of Him that bringeth glad tidings!' How are the thoughts exalted in high places! What are the rhapsodies on the mountain top! How paltry seem the affairs of men in the distant valley, when one stands on a lofty summit, with the canyon's gloom beneath him and the great northeast wind upon his brow, — when

mountain chains stretch out before him, the forests beneath, and the crags piling tumultuously around his feet, — and his gaze sweeps over a vast expanse of rifted cliffs and snowy peaks into the far distance, where filmy clouds drift across purple hills, which are lost at last in the infinite beyond! Then the true artist strives in vain to calm his beating heart; his brain is afire, every nerve is tingling. The weight of thousands of feet of atmosphere is lifted from his head, and his soul leaps in ecstasy. For the emotions especially aroused by mountain scenery are those of sublimity, awe and grandeur, — emotions impossible to inspire by figure pictures or by those of valley scenery. Ruskin says that mountains have always possessed the power, first, of exciting religious enthusiasm; secondly, of purifying religious faith.

" . . . My own appreciation of mountain beauty and its pictorial allurements has grown out of my wanderings in Utah, particularly amidst the wild and picturesque scenery of the Wasatch and Uinta ranges. . . . Some of our mountains, with their splendid bold fronts rising from the grassy valley, are as fine in form and color as any in the world. It is a marked characteristic of the Salt Lake Valley, that the western front of the Wasatch presents its massive wall sheer and precipitous above the level vale, without foot-hills, and absolutely without the lateral ranges which are rarely absent from the neighborhood of high peaks in other countries. It is this feature which makes the Wasatch mountains so magnificently beautiful, challenging the admiration of artists particularly, who rejoice in the splendid lines carved in the mountain side, sometimes sweeping from the highest peak to mountain-foot. These lines are curved and graceful, most of them taking the ideal line of beauty. Indeed the line of beauty is never swung until the mountain flings it forth. . . . Again! I think of the Alpine lakes, of the Cottonwood canyons, Lake Mary and many others,

and of one high lonely pool of melted ice that sleeps far above them all. Vast beds of gleaming snow lie along its edge in July and August, and the waters have that pale, intangible hue of green so characteristic of glacial pools. The altitude is so great that the vegetation is of a different nature to that which surrounds the lower lakes. The great wind currents which sweep incessantly from the northeast across all the high mountain peaks of Utah, have exerted their steady pressure on the hoary old pines, until they cling in a most weird and fantastic manner to the porphyritic cliffs. It is the limit of timber; the mountains above are bare and scored with perpendicular lines, down which avalanches have rushed with uninterrupted force for centuries."

It was singularly appropriate, therefore, that with such sublime thoughts and conceptions of the mountains as these in his heart, Mr. Culmer's last painting should have been of "Moonlight on the Weber River," in the Uinta range. He and President W. F. Jensen of the Salt Lake Commercial Club had been on a fishing trip on the Weber the preceding summer. One day they were overtaken by a severe storm. They remained under shelter until evening when the storm broke to give away to a wonderful moonlit night. Between two big trees, the moon, surrounded by a magnificent cloud effect, played down upon the dancing waters of the Weber. Both stopped and enjoyed the scene for a while and then each declared it the most beautiful he had ever seen. "Paint it for me!" requested Mr. Jensen, and it was while putting the finishing touches upon this picture that the artist was taken ill, and, a few days later, January 10, 1914, passed away.

He has gone, but his work remains, and even in the reproduction of one of his loved mountain scenes presented in these pages, the reader is assured of his great and lasting genius. I have been thus expansive in dealing with Culmer and his work, because I regard him as pre-

eminently the greatest painter Utah has produced. Yet the state has other artists whose work must have, at least, brief mention.

According to Tullidge, the first man to devote himself entirely to the brush in Utah was William Majors, who painted small profile portraits, some of which are still found, highly prized, in the homes of the earliest settlers. He died in London in 1853.

In 1861 came George M. Ottinger, whose conscientious and original work is found in the scenery of the old theater, and in various canvases that found great favor with the public, both in Utah and the East. During the Civil War he made some excellent pictures, and his "Overland Pony Express" was published in *Harper's Weekly*. In his larger and more pretentious work he struck out into decidedly western lines. He was particularly carried away with Prescott's historical genius and sought to visualize upon canvas many of the most vivid scenes of Mexican history. Some of his paintings are notable, especially his "Montezuma Receiving the News of the Landing of Cortez."

In 1862 Daniel A. Weggeland, a native of Norway, arrived in Salt Lake City. He had been trained in the art schools and by the artists of his own country and Denmark, and had also had some experience in England. On his arrival he was speedily engaged on the scenery of the new theater, and later his canvases began to attract attention. He won several gold and silver medals and diplomas of merit, and those who now own his pictures are particularly proud of them.

A year later came John Tullidge, an Englishman, from Weymouth, and quite a number of his landscapes found their way into the collections of the Walker brothers, both of whom fully appreciated his artistic ability.

It was largely through the efforts of Ottinger, Weggeland and Tullidge that the Deseret Academy of Arts was

organized in 1863. This institution did great good in furthering art education in the chief city of the new state, though its efforts were not long-lived.

In 1866 another Englishman, Arthur Mitchell, arrived in Salt Lake City. He was very fond of painting fruit pieces and showed wonderful aptitude in this regard, though now and again, a rarely delicate landscape, of small size, would come from his brush. These are all highly prized by their happy possessors.

Ruben Kirkham, who lived in Logan, also arrived about this time, and being soon enamoured of the stupendous scenes of the Wasatch and other mountain ranges of Utah, he began to depict the grand and majestic, the glorious and sublime features that so appealed to him.

Though he came to Salt Lake City in 1866, a boy of sixteen, it was in 1870 that he began to attract some notice by his attempts at artistic expression. He was ambitious to become a great painter, and several pictures of his that adorn the walls of Salt Lake City homes show that he had some originality and considerable force and vigor. But his pupil and friend, Culmer, soon surpassed him, and he will later be better known for the help he rendered the younger artist, than by any achievements of his own, worthy though they are of high consideration.

One of the most popular of the living artists of Utah today is a native, J. B. Fairbanks, who was born at Payson, December 27, 1855. His eagerness as a boy to know something of painting and how it was done, is illustrated by the story that, when he was quite a lad, he hovered eagerly about the Union Hall, hoping he might be admitted and thus be enabled to see the painters at work on some new scenery. One of the painters seeing his eagerness, made him happy by telling him that if he would carry water for them he might come into the hall. He very gladly accepted the position as water-carrier, and as he watched the work he even ventured suggestions rel-

ative to the scenery, and some of these suggestions were accepted. When Fairbanks was eighteen years of age he received considerable help in his studies of drawing from a Mr. J. L. Townsend, an eastern college graduate, who came to teach school at Payson, and the following year he was made happy by seeing a real artist at work using real tube-colors and the dainty brushes of the profession. This artist was John Hafen, and he set Fairbanks at work copying such representations as he deemed would be helpful to the struggling youth. He evidently was pleased with his success, for, soon thereafter, he took him into partnership in the work of enlarged portrait painting. Then in June, 1890, came the great opportunity. The officials of the Mormon Church chose Hafen, Lorus Pratt, and Fairbanks to go to Paris to study under the best masters in order that on their return they might decorate some of the rooms of the Salt Lake Temple. On the first of August he entered, with his companions, the Academy Julian and studied under Benj. Constant, Jules Lefebre, M. Duce and Jean Paul Loranz. In the spring of '91 he went out into the country and for three months studied very hard, sketching and painting landscapes. When he returned to the city Will Clawson suggested that he go for a month with him under an American landscape artist, Mr. Scott, now a professor in one of the leading art schools in Paris. He did so and reaped considerable benefit from even this brief instruction. The next spring and summer he studied landscapes under Albert Rigolot, a noted French artist, who was a student under Pallou, one of Corot's favorite pupils.

At the conclusion of this work he took some of his studies of the country for criticism to his old professor, Constant. The master accorded him high praise and bade him strike out for himself, avoiding all *ruts,* and he would make a great artist.

Returning to Salt Lake City from January to April,

1894, he assisted in decorating some of the rooms in the Salt Lake Temple. At the Utah State Fair of that year Mr. Fairbanks took the first prize for the best landscape painting.

In 1900 and 1901 he accompanied an exploration expedition through southern Utah, Arizona, Mexico, Central America, and into South America, as artist and photographer. When in Mexico City he made a number of paintings and sketches. In Santa Marta, South America, he made a careful study of the ocean and drew many sketches from which he afterwards produced some excellent marine scenes.

On returning from South America Mr. Fairbanks came by way of New York, and here he was so attracted by the opportunities afforded that he returned in 1902 and practically spent four years in the metropolis, studying, sketching up the Hudson River and elsewhere, and copying some of the masterpieces of the Metropolitan Museum. It was while here he made the copy of Rosa Bonheur's "Horse Fair," which now occupies an honored position in the rooms of the Provo Commercial Club. One of his original paintings, "Ships That Pass in the Night," was accepted in the exhibition of the National Academy of Design; and in other exhibitions he was represented.

In 1914 Mr. Fairbanks and his son Avard went to Paris, France, stopping in Chicago, New York, Boston, Liverpool and London, visiting artist friends and museums. While in New York Avard modeled a portrait of a child playing with a book. His father thought so well of it that he sent it to the Paris Salon, where it was exhibited.

Mr. Fairbanks and his son arrived in Paris May 1st. Mr. Fairbanks entered a night school to brush up on his drawing and during the day-time worked in his studio or sketched in the country and in the parks. Avard entered the *Ecole des Beaux Arts,* photographs of his work being

sufficient recommendation to gain admittance for him.

When the war broke out the two artists were in the country bordering Switzerland. The war cut short their study in France and they returned to America.

In 1917 Mr. Fairbanks went to Little Zion Canyon, now Zion National Park. It was then just merging into popularity. He has now spent four summers there, making careful study of colors and forms, selecting the very best subjects and the very best time of day for his work. His paintings are true to nature, their originals having been studied day after day at the same hours and under the same climatic conditions. They are becoming very popular with people who have visited the canyon. Dr. G. W. Middleton has one of the best paintings of this series, "The Great White Throne." Another, "The Temple of the Sun," hangs in the home of the Commercial Club in Salt Lake City. Another is "The Angel's Landing" and "Hixe's Point in Early Morning." Dr. Leonard of Denver has another, "El Gubenadore."

During the summer of 1920 Mr. Fairbanks went to Bryce Canyon and made careful studies, from which he produced what he considers some of his best productions.

Mr. Fairbanks has exhibited at Omaha (World's Fair), also in several New York exhibitions, including that of the National Academy of Design, also in Boston. He was vice-president of the Utah Art Institute when it was created and author of a bill that brought the institute $1,000.00 per year for the purchase of art works. At the Utah State Fair in 1920 he received the first prize for marine painting and second and third for his landscapes, and elsewhere his paintings have been especially honored.

He is a member of the American Artist's Association of Paris, the Society of Utah Artists, and the American Federation of Arts.

The influence Utah has had on artists who have been merely temporary sojourners within her borders is well

CYRUS E. DALLIN, SCULPTOR.

evidenced by some of the master paintings reproduced in government publications of an early day. Then, too, later artists are attracted by the splendor of the scenes offered, and one of the reproductions of a Zion Canyon painting is by an artist of this class. This is Orion Putnam's strikingly vivid and colorful "Angel's Landing," which gives a general view of the splendor of the canyon when the color effects are most powerful. Mr. Putnam for many years has been the artistic head of the photographic firm known as The Putnam Studios, in Los Angeles, but for several years past he has largely devoted himself to work with the brush and with admirable results.

UTAH SCULPTORS

Whence comes the art instinct? What is it that seizes some men, youths, boys, (and those of the other sex) and urges them to mould clay into the likeness of living things; to take canvas and depict thereon the scenes that have thrilled, pleased, delighted them? Are art-instincts "holdovers" from an earlier existence? Does one have to have a prior training in the refinements of life, the fundamentals of esthetics ere he is subject to the art impulse?

These and a hundred other questions will assert themselves when one talks about Cyrus Edwin Dallin, the now famous sculptor, with C. H. Blanchard, of Salt Lake City, the man who first noted his artistic ability. Dallin was a rude miner. Born of English parents at Springville, Utah, at the foot of the noble Wasatch range of mountains, November 22, 1861, he seemed destined for the ordinary life of the western boys of his time. Money was scarce, labor urgent and plentiful, the struggle for existence hard, and as he grew up seven other mouths to feed came to the Dallin nest. Cyrus's home was a one-story log cabin, and while his daily food was rough and hearty, his mind and soul were feasted with the glories and beau-

ties of one of the most majestic ranges on this continent, stern rocky masses towering into the turquoise blue of the Utah sky, crowned with dazzling snow upon which the Utah sun brilliantly shone, the steep slopes seamed with wild picturesque canyons, where white-foamed streams dashed madly to the plain, and the foothills of which were covered with a brilliant display of numberless wild flowers. Indians were numerous in those days, and after their summers of hunting, fishing, and gathering of pinion nuts, wild grass seeds and other edibles in the mountains, they would cluster near the little settlements in the valley for the winter, erect their rude "wikiups" or skin and brush houses, and there live out their simple but picturesque lives.

Was the growing lad influenced by these sublime and picturesque environments? Who can tell? He knows that he had to work hard enough to keep mind and body busy. Barefooted, wearing home-spun, home-made, home-patched clothes, herding cows and horses, chopping and sawing firewood, gathering wild berries, digging sego roots, shooting ducks and other birds for the family table, he could not have been picked out from any other of the thousand and one active boys who were having like experiences all over Utah. When he was fourteen years old he and a comrade undertook to drive a wagon loaded with produce to Alta, a silver mining camp, forty miles away, in Cottonwood Canyon, three times a week. See the youngsters, their wagon loaded, horses harnessed and hitched up ready to start. They must leave in the afternoon so as to get their load to market as quickly after gathering as they could. After driving as far as possible they would stop and make camp, feed and hobble the horses, roll out their blankets on the ground, stretch out and sleep under the stars until the first suggestion of dawn, then up, a hasty snack before the tiny camp-fire, harness up and off before a modern watch would have

shown the hour of five. Slowly they climbed up the canyon to the elevated mining camp, with the elevated name, unconsciously, perhaps, but, nevertheless, surely, drinking in the beauty of the passing scene, and then, on their arrival about noon the lads sold their load, rested the horses and then started home by way of Granite. For this labor they received fifty cents a day, and though the occupation lasted only three months in the year they were glad to have it.

While Cyrus was quite a lad a Rev. Mr. Leonard, an old-fashioned Presbyterian minister, came to Springville and started a school. He had a natural affection for boys, and they liked him and were not afraid of him. One day he discovered that Cyrus had an aptitude in drawing and from that time on he fostered the desire by urging him to copy certain prints that he had. These were sent to Salt Lake City and exhibited, and the old teacher was proud enough of his pupil to secure a good notice of the lad's work in one of the papers. Then it was desired to persuade eastern friends to provide funds for a new school house, and to aid in the campaign Mr. Leonard got Cyrus to make a drawing of the old adobe, then doing service. And for this he received pay, the first paid commission, and how proud and happy it made him.

Then, when about seventeen years of age, he and his father went to work in one of the Tintic mines, of which Mr. C. H. Blanchard, later his patron, was superintendent. This was the important step that led to the change in his life. One day, while the miners were at work, some chalky-looking clay turned up. When lunch time came Cyrus got a lump of it and enjoyed himself in shaping two portrait busts out of it. His rude companions looked upon him with wonder, for the work was striking enough to arrest their attention. The foreman also became interested and soon the fame of the young sculptor's work reached the ears of Mr. Blanchard. When the latter saw the work

his Boston trained intellect instinctively recognized genius. He took the lad's work to Salt Lake City and soon interested Joab Lawrence and others in financing the budding genius to a year in Truman St. Bartlett's school in Boston. Here began his real training. He worked with the day class and his first attempt was on the head of a tiger. How swiftly that first year went, and how carefully he husbanded the little cash his Utah friends had provided him with. When it was gone there was no repining, no fault finding, but resolutely relying upon himself, now that he had found his feet, he went to work at a terra cotta factory, moulding pottery and sometimes being cheered with an order to work on graveyard designs. Commercial work though it was, it gave his hands greater strength and power to obey the dictates of his mind, and beside, it furnished him with funds to continue his beloved studies. Then, in 1882, he found his wings and resolved to fly. He took a studio in Boston and here he worked on busts and living models, determined to tackle the hardest branch of his art and master it. Those were struggling days, but as Dallin himself said in a recent conversation: "I think the artist who never tasted the bitterness of hard struggle, has never felt the real flavor of success." To him success is never money. The consciousness of seeing one's creations work out into the form he has planned them brings greater joy, and if the money comes, it is welcome in that it means opportunity to give one's life more completely to the calling in which it is devoted. Continuing, he said: "There is a point in every artist's progress when his life ceases to be a continuous struggle. If there were not, the world would be little entitled to the service of its artists. The problem is whether one can successfully fight to this point, or is to be wrecked in the adversities around him before he reaches it, finishing his life as a derelict instead of at anchor in a permanent success."

This point was reached in Dallin's own life when the committee of Boston citizens determined upon an unique competition for a statue to commemorate the ride of Paul Revere. It was unique in that they secured a board of eminent sculptors to determine who should be invited to compete. These competitors then were to be paid for the time spent and the material put into their work. After that, the three most successful were again to compete for the honor of making the model from which the statue would be erected. Dallin was one of those chosen to compete, and in the first trial he, D. C. French and James E. Kelly, the latter both of New York, were successful, and in the next attempt his model was the one chosen. This was the sculptor's entrance to the golden pathway of success. Strange to say, however, the statue has not yet been erected. While there was much enthusiasm at the time the competition was started, the funds needed did not materialize and the matter is still in abeyance. But it has answered its allotted purpose in Cyrus Dallin's life, and from that time on he has held foremost place in the rank of leading American sculptors. He has received the following honors: Gold Medal, American Art Association, New York, 1888; Honorable Mention, Paris Salon, 1890; First Class Medal and Diploma, World's Columbian Exposition; Silver Medals, Massachusetts Charitable Mechanical Association, Boston, 1895; Paris Exposition, 1900; Pan American Exposition, 1901; Gold Medal, St. Louis Exposition, 1904; First Prize in competion for Soldiers' and Sailors' Monument, Syracuse, 1906. He is a member of the Society of Arts, London; National Sculpture Society, Architectural League, New York; St. Botolph's Club, Boston. His principal works are Signal of Peace, Sir Isaac Newton, Pioneer Monument, Salt Lake City, Angel for Salt Lake Temple, Don Quixote, Apollo and Hyacinthus, Medicine Man, The Clergy-

man, and his latest is a heroic statue of Ann Hutchinson, for the Boston State Capitol.

After his success in the Paul Revere competition he worked hard, and finally turned his attention to Indian figures in which he has proven himself a master. How well I remember the powerful impression made upon me at the first sight of his "Signal of Peace." Half a lifetime spent in contact with Indians, riding their wild mustangs, familiarizing myself with their customs gave me a critical knowledge of them that enabled me properly to estimate the masterly character of the work, and the first impression of genius thus received, has grown as "The Protest," "The Medicine Man," and other figures have materialized from his fertile brain. His latest masterpiece is of Ann Hutchinson, the famous Puritan of New England. The sculptor has seized and immortalized that moment, when, after receiving the banishment order by the General Court of Massachusetts, she lifts her eyes to heaven and exclaims: "It is better to be banished from the church than to deny Christ." Her left arm clasps a Bible to her breast, and her right hand rests protectingly upon the shoulder of her little daughter who is clinging to her gown. Both are dressed in the Puritan costume of the time.

Dallin is yet a young man. He is in the heyday of his power. The West, Utah, is proud of him, but it confidently looks for many even more masterly products from his hands and brain.

The couchant lion on the Lion House was the work of George Ward, a sculptor, who came to Salt Lake City about 1852-3. He remained but a few years and then returned to the East.

The masterly work of Mahonri Young has already been referred to in the chapters on Salt Lake City, Irrigation, and Dr. Plummer. I regret that I cannot give more in detail the work of his life.

"MEDICINE MAN"—BY CYRUS E. DALLIN.

Another of Utah's boys who has made a notable name for himself as a sculptor is Melvin Earl Cummings. He was born in Salt Lake City, August 13, 1876. On both sides of the family his ancestors were prominent in Mormon circles. He began his career as a sculptor at a very early age, using a button-hook to chip edges off the granite of Brigham Young's tombstone to sell to tourists. As Mr. Cummings now holds the honored and dignified position of Professor of Sculpture in the University of California it may be "giving him away" to tell this story of his artistic beginnings, but that it is true there is no doubt as he and his friends often joke about it. After receiving the usual education in the public schools of Salt Lake City, he took a course in the Agricultural College in Logan, and then spent a year in his father's bank, who, for many years was the highly esteemed treasurer of the city. But he was not destined for a commercial life. About this time there arose somewhat of a "craze" for wood-carving; and he thought it would be well to learn the art, hence, from the time he was fifteen until he was nineteen, he worked pretty steadily, gaining a thorough knowledge of the fundamentals of this branch of artistic endeavor.

Then his parents allowed him to enter the Hopkins Institute of Art, in San Francisco, where for three years he devoted himself seriously to sculpture. Here he made such rapid progress as to win several scholarships, and he thus came prominently into the eye of the university regents. One of them introduced him to that philanthropic and beneficent patron of rising artists, Mrs. Phoebe Hearst. She was so pleased with the youth's advancement, which seemed to her full of promise, that she sent Mr. Cummings to Paris, and for three years kept him there, while he studied in L'Ecole des Beaux Arts, and under such masters as Massiet and Louis Noel. Each year his productions were accepted and exhibited in

the salon, one of his choicest pieces being a portrait bust of the daughter of Judge Dixon.

On his return to San Francisco he opened a studio, and was soon commissioned to design a fountain for Golden Gate Park. This was accepted. It represents a boy playing with a tortoise and occupies a striking place in front of the conservatory. Then the Scottish Society, desirous of placing a statue of their beloved poet, Robert Burns, in the park, called upon him to create it. This figure has received many words of high praise from world-travelers, and is a common rendezvous for those who visit the park from the land of heather. Others of Mr. Cummings' public works are a fountain, representing an old man drinking out of his hands, located in Washington Square; a Sun Dial, erected for the Colonial Dames, near to the museum, in Golden Gate Park; and a monument to Reuben Lloyd, one of San Francisco's prominent attorneys, also in the park. His latest work is another fountain, which was recently placed in front of the new museum.

At the Panama-Pacific Exposition, in 1915, his "Pool of Enchantment," where two pumas crouched absolutely fascinated and tamed by the piping of an Indian boy, was regarded as one of the notable marbles exhibited. Then, too, it should not be forgotten that when it was desired to build a monument at the Presidio of Monterey in honor of Commodore Sloat — who seized California for the United States — in the public competition which ensued, when thirty-five models were submitted, the committee unanimously chose Mr. Cummings' model. It is in the form of a granite pyramid, upon which is a portrait of Sloat in relief, the whole surmounted by a large eagle. In 1897-8 he displayed at the Bohemian Club, San Francisco, of which he has long been a member, a strongly attractive figure in plaster of a nude boy seated on a globe. This received so many plaudits from the members, that

"POOL OF ENCHANTMENT"—BY MELVIN EARL CUMMINGS.

they finally decided to have it reproduced in bronze, and it now occupies an honored position in the reception room of the world-famous club.

In 1904 the Mayor of San Francisco appointed him as the artist member of the Board of Commissioners of Golden Gate Park, and though there have been several changes of administration since that time, each one has honored him by asking him to remain on the board. And in 1921 he completes his fifteenth year as Professor of Sculpture of the University of California, a position he has filled with honor and credit alike to the university and himself and to the rapid advancement of those students who have placed themselves under his artistic direction.

Professor Cummings is now at work on an equestrian statue of General Richard W. Young, for Salt Lake City, and a memorial to the late Dennett C. Sullivan of San Francisco.

CHAPTER XXI

SALT LAKE CITY

Salt Lake City is one of the unique cities of the American continent, indeed of the world. Benares, Amritsar, Mecca, Rome do not mean more to the devotees of the religions that fixed their headquarters in them than does Salt Lake City to the devout Mormon. Within its precincts are found the chief temple for his induction into the mysteries of his faith, and the large tabernacle in which to worship. Hitherward he sends his tithes, and to his leaders, here resident, he looks for counsel and direction in matters pertaining to his church membership, both as to temporal and spiritual duties.

It is unique, also, in its remarkable history, and that in its "laying out" it bears, and will forever bear, the impress of the one master-mind that operated at its founding. What faith he possessed! What foresight he revealed! How faith and foresight clasped hands with beauty and utility and laid out those streets that are the perpetual delight of the residents and a source of equal though ephemeral pleasure to its thousands of annual visitors, is now known to the world.

Early day travelers from Europe attracted to Salt Lake City by the peculiar tenets of Mormonism, as well as those of our own land, were unanimous in their praise of the location of this city. Scores of quotations might be given, indeed, enough to fill up this whole volume, so, it must be confessed that it is attractive. Nestling in a curve of the great Wasatch range which protects it from the fierce winds of the north and the east, it practically rises

on uneven benches or natural terraces from the level of the great lake. Looked at from the shores of the lake, or, on a clear day, from the slopes of the Oquirrh range on the opposite side of the lake, it is a city to provoke exclamations of delight. It is equally interesting and beautiful, though the scene presented is of an entirely different character, when viewed from Fort Douglas, or from the University campus. Seen from any standpoint the Great Salt Lake dominates the landscape. Its pure blue, when it is calm and quiet, reflects the floating glory of the dazzling clouds of the sky, or, when the atmosphere is murky its face is leaden and sullen, and again, when the winds blow, white-capped waves dance and glitter, swell and roll and give it quite a different appearance.

Look at the city now from the shores of the lake. Let the view be taken late in the afternoon, when the westering sun is shooting its brilliant rays toward the east. Salt Lake City is essentially a garden or tree-bowered city, hence everything we see is in happy combination and contrast to the rich foliage which is found everywhere. From these bosky bases rise the various buildings of a great and prosperous city. Here is a church, with its towering spire, there an equally soaring "sky-scraping" office building, streets are revealed and solitary dwelling-houses. To the north-east a prominent group demands the eye, and we see the beetle-shaped tabernacle, the near-by soaring spires of the granite temple, then the great Hotel Utah, followed by the classic office building of the L. D. S. Church. Higher up, on one of the benches, stands the capitol, a classical Greek structure of majestic proportions, proudly typifying the glory of the state. Now let the eye slowly move over the vast panorama towards the east and south. Buildings everywhere, tree-shaded and contrasted, homes of every type, many of them new and modern, rise on the benches higher and higher, even, apparently, to the very foot of the range. Now the University, with its sev-

eral fine buildings comes into view, and schools, churches, office buildings surrounded by homes. To the south is the stately City and County Building, located in a ravishingly beautiful park, and then the eye wanders out to the spaces of the emerald valley, where the fertile acres extend for miles to the far mountain boundaries. Here and there are flashes of the Jordan River and Utah Lake, while as a fitting background for the whole scene are the towering walls and peaks of the Wasatch range, which rise almost immediately behind the city.

When the point of outlook is reversed and one stands at Fort Douglas or on the University campus the glory of the city is just as great, but it is changed, and instead of the mountains forming an immediate background, there are the meadows that lead the eye to the great lake, then the shimmering, glistening water, Saltair and its great pavilion shining like a jewel upon its edge, then the foothills, where the giant smelters at Garfield pour out their clouds of smoke, and as a semi-distant western boundary the walls and peaks of the Oquirrh range.

There is but one flaw in the otherwise perfect picture and location. During certain times in the year when the wind is in a certain direction, the smoke from the city's chimneys seems unable to escape from the mountain pocket in which the city is located, and this necessarily is an annoyance and disagreeable. The scientists, however, are working upon the problem, and I doubt not that it will ere long be perfectly solved.

Immediately upon entering the streets of the city one is impressed by their width and parklike arrangement. They are all boulevards. With a confidently expansive outlook for the future Brigham Young laid out his city with a scientific wisdom that makes it, in this regard, without an equal on the American continent. The streets are all one hundred and thirty-two feet wide between the fence lines. Twenty feet of this, on each side, belong to the sidewalk.

CITY AND COUNTY BUILDING, SALT LAKE CITY.

Many of the streets have the center beautifully parked, beds of gorgeous flowers and green lawns attracting the eye on the level, and trees affording abundant summer shade overhead.

Naturally the principal business streets are solidly paved and without trees, but down each side a stream of clear mountain water runs almost continuously in the gutter, and, joy unbounded to the thirsty thousands, there are bubbling fountains at every corner, which sing of melting snows, tuneful cataracts, dashing mountain torrents, mountain peaks and the wonderful freedom, purity and delicious coolness of the heights. I never drink as much water at any other time, as I do when, in the summer, I happen to visit Salt Lake City.

The most attractive quarter of the city to the visitor is the Temple Block, upon which towers the many pinnacled temple and the oval-topped tabernacle. The temple is a most impressive building, practically alike at each end, where two towers occupy the corners and a higher tower dominates the center. The walls of the main building are solidly built, semi-buttresses making the frame-work for the high windows. The structure is of granite, quarried from the Wasatch mountains, about twenty miles southeast of the city. The site is still pointed out. At first the huge blocks of stone were brought on specially constructed carts, drawn by four yoke of oxen, but so slowly did they travel that it often required four days to transport a single block. Then in 1873 a railway was built to the quarry and this expedited the work. The foundation walls were laid less than six years after the first pioneers reached Salt Lake. They were sixteen feet wide and eight feet deep. The building was to be one hundred eighty-six and one-half feet long by ninety-nine feet wide, and its greatest height two hundred twenty-two feet to the top of the figure which surmounts the central eastern tower. Slowly the walls arose, varying in thickness from six to

nine feet, and in 1893, just forty years after the work was begun, the structure was declared finished. Great were the rejoicings and many days were spent in its dedication. Its cost is said to have been about $4,000,000.

This temple, however, unlike the cathedrals, churches, synagogues of other worshippers is not a place of public assembly and worship. Though visitors were allowed prior to the chief day of dedication, April 6, 1893, none have been permitted to enter since. It is a building especially erected for the performance of the sacred rites of the Mormon Church, to which none but the faithful are admitted. Members are received, marriages take place, also baptisms and other ordinances, which to the Mormons are of the highest importance. Naturally in the earlier days of Mormonism there were many so-called "exposes" of the ceremonies that took place in this building, and some writers sought to travesty them. To the unprejudiced mind there is nothing to excite either undue curiosity or ridicule. Every church has its own peculiar ceremonials and these are no stranger than many that are performed in public without comment.

In the same grounds are the Tabernacle and the Assembly Hall, the former being one of the famous buildings of the world. Its history is most interesting, and a full account of it has been written by my friend, Professor Levi Edgar Young, of the State University. According to him:

"The Mormon Tabernacle at Salt Lake City is indicative of the strength of character and religious dreams of the Latter-day Saints. The only building of its style in the world, it stands out as unique in the history of architecture. While its massiveness suggests a people strong in spirit, conviction, and purpose, its lines indicate a splendid adaptation of scientific principles in architecture. The Tabernacle is a perfect ellipse, with two foci, which partly account for the good acoustics of the building. A plain,

The Temple Grounds, Salt Lake City

Showing the Temple and the Tabernacle

egg-shaped building, studded with heavy entrance doors all the way round there is no attempt at ornamentation of any kind, and yet the building is wonderful, both on the exterior as well as in the interior, and is an example of the utilizing of the resources of the people for the purpose of elevating their intellectual and religious idealism.

"The Tabernacle is one of the largest auditoriums in the world, and seats from six to eight thousand people. It is two hundred and fifty feet long by one hundred and fifty feet wide, and eighty feet in height. The self-supporting roof rests upon pillars or buttresses of red sandstone, which are from ten to twelve feet apart in the entire circumference of the building. These buttresses support great wooden arches, which span one hundred and fifty feet. The arches are of a lattice truss construction, and are held together with great wooden pegs and bindings of cowhide. On the interior one is impressed with the great vaulted ceiling, and the 'vastness of the place grows upon one and inspires one with mingled feeling of solemnity and admiration.'"

The Tabernacle occupies the site of the old Tabernacle, built in 1851-2, and this, in turn took the place of the "Bowery," a primitive structure of timbers and tree boughs, temporarily used for purposes of worship.

"It was in 1863 that the Tabernacle was begun. The plan of the building was due to President Brigham Young, William H. Folsom, and Henry Grow.

"Mr. Grow had a unique scheme for the roof, a plan which was adopted and executed. Some few years before he had built a bridge over the Jordan River, immediately west of the city. 'It was constructed after the Remington patent of lattice bridges, in which planking and pegs were used.' Mr. Grow was a bridge-builder in his native state, Pennsylvania, and had constructed many bridges of the Remington type. On coming west, he obtained permission from the inventor to use the idea in Utah, and it

was accepted by President Young as the one practical theory for the construction of the new house of worship. The two mechanics, Grow and Folsom, drew the plans for the building which will ever mark them as geniuses in the profession of architecture.

"The immense roof, which is the principal portion of the building, rests upon forty-four piers of cut sandstone masonry, each nine feet from the outside to the inside of the building, three feet in thickness, and twenty feet in height. On each side of the building are nine pillars in a straight line. From these an arch of forty-eight feet is sprung. Thirteen arches spring at each end from thirteen piers, which stand on a circle. The height from the floor to the ceiling, in the center of the building is seventy feet. Between the ceiling and the roof, there is a space of nine feet. The roof is framed of lattice-arched beams, twelve feet from center to center, each arch converging and meeting at the highest given point of the main outside bents, where they are securely fastened with cowhide and wooden pegs. On the north and south sides are thirty spaces between the piers, where the windows, containing over 2,500 lights of glass, are placed. In twelve of the spaces are the doors opening outward, which affords ready egress from the building. There are four small doors in the west end of the building, and two large ones in the east end, leading to the gallery.

"Above the piers are over one million feet of timber; in the floor, 80,000 feet; in the joists, 100,000 feet; in the sleepers, 30,000 feet; in the doors, stand, benches, and other equipment, 290,000 feet; in the aggregate, 1,500,000 feet. The roof was originally covered with nearly 400,000 shingles, but these were replaced in 1900 by a metallic covering weighing many tons. No nails were used in the roof, the timbers being tied in places with cowhide and held together with wooden pegs.

"At first there was no gallery in the building, but in

1870 the large gallery was built around the entire building with the exception of where the choir seats are placed. This lessened the effect of vastness in the building as well as diminishing the apparent height. It measures three hundred ninety-five feet from one end to the other, and is thirty-two feet in width. Supported by seventy-two columns, the lines add to the artistic effect of the building. The gallery will seat about 2,000 people. With the finishing of the gallery, the acoustic properties were improved, making it one of the best places for hearing in the world. The Tabernacle, like many other of the beautiful buildings in Salt Lake City, observes the laws of proportion and purity of style. Its plainness and simplicity are the leading characteristics, and show that the men who had the direction of its building were great mathematical and constructive artists."

The organ has an equally interesting history. Joseph H. Ridges, an Englishman, undertook the work, with selected associates, who knew they would have to rely entirely upon native products for construction. Specimens of wood were gathered from all over the state and experimented with, until it was decided that the best material for the pipes was to be had in Pine Valley near Parowan, three hundred miles south of Salt Lake City.

Work was begun in January, 1866, and it was completed and dedicated in October, 1867. Several times since then it has been improved and enlarged, and is known to the musical world as one of the largest and most perfect instruments in existence. In its present condition it has four manuals with electric action to every part of its one hundred and twelve sets of pipes, and its seven different organs — viz., great, swell, orchestral, solo, celestial, string and pedal.

Its organists are John J. McClellan, and his two assistants, Edward P. Kimball and Tracey Y. Cannon, all three

natives of Utah, but master musicians, trained in the best schools of this country and Europe.

Daily, except Sunday, these accomplished performers give organ recitals for the benefit of the thousands of tourists who continually keep pouring through Salt Lake City. During the recitals, in order that there be no interference either with the performer or the listeners, it is the rule to close and lock the doors.

Apropos of this habit, a funny but literally true incident was related to me. A number of tourists came at the usual hour and were informed that the recital would last so long and that the doors would be closed during that period. Half-way through the performance two ladies arose and endeavored to go out. Had the sacristan been at hand all would have been well, and the doors would have been opened. But, unfortunately, he had gone away for other duties. The ladies tried one door, then three or four others in succession, and failing in all alike, one of them burst out with a piercing shriek, while the other screamed: "The doors are locked! The doors are locked!" Immediately the whole audience was seized with panic — fortunately it was not a very large one — and rushed down stairs. Such was their instant dread and foolish terror that they battered down the door before it could be opened.

Later, when one of them was remonstrated with about his yielding to such a foolish panic he replied: "I thought of the Mountain Meadow massacre and wasn't going to take any chances with those fellows."

Evidently in his case music did not have a soothing effect. Yet thousands have borne tribute to the wonderful quality of the organ, in its power to evoke every emotion, when manipulated by one who is its master.

The organ, however, is but an aid to the more important feature of public worship, viz., the human voice. Mormons believe in congregational singing, and they sing

THE SEA-GULL MONUMENT, IN THE TEMPLE GROUNDS,
SALT LAKE CITY.

heartily, but they also believe in having an excellent and well-trained choir to lead them. Such a choir the Tabernacle has had ever since it was erected. Noted men have been its leaders, men whose musical ability and knowledge gave them power when they wielded the baton. It has been my pleasure to hear this choir many times, under several of its noted leaders. One of these, who is still alive, and who composed and conducted at the Centennial Celebration in 1920 the sacred cantata entitled *The Vision,* commemorative of the visitation of the Father and the Son to the Prophet Joseph Smith in 1820, is Evan Stephens, gained world-wide fame as a conductor of great choruses. It was he who took the Mormon Tabernacle Choir to the Chicago Exposition in 1893. Joseph Daynes was his organist. To merely name the leaders and organists of the past would be to call the roll of many names famous in the musical world. The present director is Professor Anthony C. Lund, the son of the late Anthony H. Lund, who was one of the First Presidency.

There is another building for worship in the Temple Block known as the Assembly Hall. It is a semi-Gothic structure capable of seating 2,500 and is used when the Tabernacle would be larger than necessary.

Near to this hall is the celebrated Sea Gull Monument, by Mahonri Young, a grandson of Brigham Young, and erected to commemorate the wonderful occurrence related in the chapter on irrigation, where the pioneers were saved from a plague of crickets by the coming of the gulls. There are four bas-reliefs at the base of the monument descriptive of the coming of the pioneers and their miraculous deliverance, and the column is surmounted by a strikingly realistic figure of a flying gull.

There are also two life-size statues in the Temple grounds, one of Joseph Smith, Jr., the Mormon prophet, and the other of his brother Hyrum.

In order to give accurate and adequate information

about Mormonism, Salt Lake City and Utah in general, a Bureau of Information has been installed, where literature of all sections may be found, and tourists and home-seekers given the guidance they need.

Across the way from the Temple Block is the magnificent and stately Hotel Utah. There are no hotel structures between Chicago and the Pacific Slope that surpass, and few that equal it. It is fire-proof and modern in every respect, with five hundred guest rooms, and adequate banquet-halls, ballrooms, committee rooms for meetings, conventions, etc. It was erected at a cost of over two million dollars and was opened in June, 1911. If Brigham Young had designed this location for the majestic "hotel of the future," he could not have found a more suitable place. Directly across the street from the Temple and Tabernacle, next door to the Office Building of the Mormon Church, at the head of the chief business street of the city, close to the theatres, and at a junction of most of the street cars, it is convenient and easy of access. Its lobby is spacious and attractive. Worthy of especial note are three of H. L. A. Culmer's finest paintings — pictures which not only reveal him Utah's finest and greatest painter, but give the traveler some idea of the less-known portions of this great state. The *Utah* has been under the competent management of George O. Relf — who had made a great reputation in Chicago as a successful hotel man — ever since its opening.

Surmounting the tower of this superb structure is a beehive, the state emblem, symbolizing activity and industry. Nor should it be forgotten that Brigham Young, when harassed by outside foes, called attention to the fact that while bees were active and industrious, they could also sting.

Almost adjoining Hotel Utah is the Office Building of the Mormon Church. Built in classic Greek style, of granite gained from the quarries of the Wasatch mountains, it

EAGLE GATE, WITH THE STATE CAPITOL IN THE BACKGROUND, SALT LAKE CITY.

is one of the most beautiful office buildings in America, indeed in the world. And its interior appointments are as perfect as is its exterior, all its finishings being in Utah marbles. Here all the general officers of the Church may be found, including the president and his counselors, and here also is the Mormon library. This includes all the written and published histories of the various societies and departments of the Church, as well as books, pamphlets and papers issued by the Mormons themselves. Besides this, there is every book known to have been published on Mormonism, either pro or con, so that the student may look upon the subject from as many angles as there have been writers.

The next buildings on the same street are the world-famous Beehive and Lion Houses, the latter once the residence of Brigham Young and his family. The former was built at an early day in Salt Lake City history and is a simple structure, its lines are most pleasing and architecturally it may be said to be the gem of all that Utah has produced in this line. Later presidents have occupied this house as their residence, but it is now used by departments of the L. D. S. University.

At the end of the block, connecting it with the next block, is the famous Eagle Gate. The bird of freedom, with outspread wings, makes a striking arch to the portal, which used to lead into Brigham Young's private grounds.

Standing at the head of Main Street is the Monument to the Pioneers. It represents Brigham Young in a characteristic pose, and is an excellent likeness of him in his prime. It is of bronze with a pedestal of Utah granite, and is the work of Dallin, whose artistic genius is elsewhere commented upon in these pages.

To attempt to describe the public buildings, churches, school houses, clubs, hospitals, hotels, offices, etc., of Salt Lake City would be too long a task. Suffice it to say they are worthy the capital of a great and growing state, and

as for the residences, one can ride for hours through streets of surpassing loveliness, where stately, palatial, dignified, modest, comfortable, cozy homes are embowered in native trees, approached by emerald lawns, and surrounded by exquisitely beautiful and gorgeous flowers of every hue.

One store of more than general interest, must, however, be referred to. This is the building on Main and South Temple Streets, bearing the inscription, Z. C. M. I. This is the legend of the Zion's Cooperative Mercantile Institution, organized October 16, 1868, by Brigham Young, which has been derided, abused and lauded about equally. Its avowed purpose was to give to Mormons the benefit of cooperative trading, and now there are over a hundred similar stores located throughout the state, owned locally by the people, but mainly drawing their supplies from the parent institution. Connected with the letters, Z. C. M. I., are generally to be found the All-Seeing Eye and the biblical exhortation, "Holiness to the Lord."

Perched on the foothills, on a most commanding site overlooking the city, is Fort Douglas, established in the early days of Utah history, when antagonism between the territorial and federal governments was feared. During the late war it was utilized as a great military post, and here, too, many alien prisoners were confined. It has a fine water supply, sufficient for over 5,000 men, and the reservation of 10,000 acres gives abundant room for both infantry and cavalry manoeuvres. It is one of the chief points of interest of the city, not only for its historic claims, but on account of the remarkable view of the city, the Great Salt Lake, and the surrounding country which it affords.

The city has several parks, Liberty Park being the chief, where the citizens congregate by the thousands to enjoy the amusements provided in the cool summer evening air. There are many mountain resorts of easy access,

UTAH STATE CAPITOL BUILDING, SALT LAKE CITY.

and Lagoon, north of the city, and Wandamere, at the southern edge, are popular resorts. But transcending them all, and known all over the world to travelers, is Saltair, a pleasure resort, built on the Great Salt Lake. Here, literally millions of people have come to enjoy bathing in the remarkably buoyant waters of the lake. No one can sink in them, though it is well to avoid swallowing the least quantity of the water, owing to its salt and bitter qualities.

The main hall is of Moorish design and is one of the largest dancing pavilions and roller skating rinks of the continent, and in the dining room a thousand people are easily accommodated at one sitting.

It was my pleasure to be present at rather a unique gathering in the great pavilion last year. It appears that, for the past forty-four years, it has been the custom of the Mormon Church in Salt Lake City, and every city in Utah, to gather together from every ward every old man or woman over the age of seventy, regardless of creed, color, race or previous condition of servitude, married, single, religious or atheist, and give them a day's holiday at some suitable and chosen place. And this gathering together is no perfunctory affair. In every ward certain officials of the Church are charged with the responsibility of listing those entitled to attend, and *seeing that they get to the point of meeting.* Those over seventy wear a red badge, over eighty, a blue one, and over ninety a white one. There was a fair scattering of blue badges and but a few white ones in the vast concourse of a thousand or more red ones on the occasion when I was present. Trainload after trainload began to leave the city directly after breakfast, and yet when I took the cars at noon there were still hundreds to be conveyed. On our arrival at the pavilion the tables were spread — absolutely laden with good things to eat, including California cantaloupes, Utah plums and cherries, and several soft drinkables. Flowers

galore adorned the scene, the fine Saltair orchestra discoursed sweet music, and flags and bunting added their gaiety to the scene. There was no confusion. Each ward had its tables, designated by large signs, and here active, vigorous, motherly women waited upon their guests, saw that they had abundance and were made to feel perfectly at home. As soon as my presence was known, a half a score cordial invitations were extended, so that when, later, I was invited to the platform to see the assembled audience, I was full of good things. Standing on the platform looking over that vast sea of, at least, two thousand faces, most of them over seventy years of age, I felt the pathos of much of their past history. Here were revealed in gnarled and seamed faces the sufferings, the hardships of the long-ago days of persecution, the weariness of the toilsome journeyings across the plains, over the Rocky Mountains, fording of dangerous streams, the terror by night watching and waiting for the attacks of hostile Indians, the endurance of sandstorms, hail and rainstorms and the pitiless snowstorms of winter. And the struggles of settlement were there, the wresting of the pitiably insufficient living from the soil in those first days of pioneering. Yet now all were joyous, glad, happy, buoyant, thankful for their successes and triumphs, grateful for all they had passed through and overcome, and buoyed up by a very real faith as to the rewards of the future.

It was a remarkably interesting gathering and one from which I gained many and interesting stories, which would fill pages of this book. For instance, one dear old lady, nearly toothless, partly blind and deaf, came to me and proudly introduced herself as one of the hand-cart brigade (whose story is told in another chapter). She herself had helped push a hand-cart from the Missouri River to Salt Lake City. One old patriarch was with the first band that reached the new Zion, and all had stories

HOTEL UTAH, SALT LAKE CITY.

that emphatically showed the change that fifty years has wrought in our civilization and progress.

One member of the audience I became much interested in. I was informed that he was engaged in a printing establishment, and had many books bearing on early Mormon history. Accepting his invitation to look over his books I was surprised to find not only the local histories I sought, but a well-selected, general library, all in excellent and well-bound editions, of over *three thousand* volumes. And this love for good books I found was by no means unusual among many of those whose income would not have suggested their interest in gaining a library. I merely relate this as one of the many surprising and interesting incidents met with in my ramblings in and about Salt Lake City.

Taken as a whole it is one of the fascinating cities, both in its history and in itself, in our western world, and no traveler should ever cross the continent who does not give himself at least a week to see what it has to present.

CHAPTER XXII

RAILWAYS IN UTAH

The first railway to cross Utah was the Union Pacific, built in that great epoch of railway construction which followed the Civil War. The government had pledged certain great bonuses of land and bonds to the Union Pacific and the Central Pacific Companies according to the mileage built, and each was straining every nerve — the one from the east and the other from the west — to earn as much of these bonuses as possible. It was a conflict of titans. The Central Pacific heads, under the dominating personality of the actual builder, Charles Crocker, imported hundreds, thousands, of Chinese coolies to assist in tunneling, grading, cutting, dumping, snow-shed building over the Sierras, and the Union Pacific imported all the help it could secure from the east, which in conjunction with the work of the Mormons, rapidly pushed the track-laying westward. As the two ends of the railway neared each other the struggle became more tense and fierce. There was no cessation of labor, nights or Sundays, continuous shifts of workmen kept the grade continually extending, and track-layers followed so closely at their heels that they almost "trod upon each other." Finally the two lines met, at Promontory Point, Utah, where, on May 10, 1869, the ceremony of driving the last spike took place. This was made the occasion of Bret Harte's poem, in which the two engines, that of the Union Pacific facing west, and that of the Central Pacific facing east, talk with and question each other.

Brigham Young, though for some reasons preferring the continued isolation of the Mormons, was statesman enough to realize the great advantage a trans-continental railway would be to them. Accordingly he aided it in every way possible, personally building many miles of it, and encouraging his people to help forward the work. When the junction was made none were more enthusiastic than the Mormons and joined more heartily in the festivities that celebrated the occasion. Naturally the next step was to connect the trans-continental line with Salt Lake City, and in a short time the Utah Central Railway was constructed under Brigham Young's direction.

In order to give transportation to various parts of the country, especially the northwest, several short lines were built, and in 1890 all were consolidated under the management of the Union Pacific Company under the name of the Oregon Short Line. The Denver and Rio Grande system extended its main line from Grand Junction, Colorado, to Salt Lake City, and a branch, running from Thistle on the main line, and known as the Sanpete Branch, was constructed to Marysvale in the south. This branch in turn had several small feeders built, mainly for the transportation of coal and ore. The Western Pacific, now the purchasers of the Denver and Rio Grande system, was started in 1905, as an extension of the latter from Salt Lake City to San Francisco. It is now in regular operation.

But as southern California's population and business facilities increased, and the mining country of southern Nevada, southern and central Utah came to the front, a new railway from Los Angeles to Salt Lake City, by a direct route became a necessity. From Salt Lake City to Sacramento by the Southern Pacific — Ogden Route — is 780 miles; from Sacramento to Los Angeles is 445 miles, making a total of 1,225 miles. It did not need Euclid to demonstrate the self-evident proposition that

one side of a triangle is shorter than the sum of its other two sides. The distance from Los Angeles to Salt Lake City by a direct route — the third side of the triangle — is about 700 miles, a practical saving of 500 miles.

Farsighted men had seen the possibility of this railway for years, and early in the modern development of Los Angeles (1888) had secured a charter for a railway from San Pedro to Los Angeles, with branches to Pasadena and elsewhere, and had named it the Los Angeles Terminal Railway. This franchise was obtained on the understanding that the Union Pacific was preparing to make its way into southern California. It had already demonstrated its intention to do this by building a line southwest from Salt Lake City to Frisco, about two hundred and forty miles, and it was subsequently extended to Uvada, seventy-five miles further, a place on the boundary line between Utah and Nevada. Then the Union Pacific fell into difficulties and nothing was done until about 1900. The whole country had suffered a period of financial depression and railway extensions in the West had largely ceased. But Los Angeles was growing with a rapidity that startled the world. It needed coal and iron for its factories and manufacturing industries. It wanted gold, silver, copper and other minerals, and it also wanted an outlet for its growing businesses. Its demands became more and more imperative, but conservative bankers and capitalists refused to aid another railway project lest it interfere with Southern Pacific and Santa Fe securities, which had suffered fearfully in sympathy with the generally prevalent depression. But Mr. T. E. Gibbon, the vice-president of the Terminal Company, who had fought some sturdy battles side by side with Senator Steve White against Collis P. Huntington for the establishment of the federal harbor at San Pedro — and had won — was not to be daunted by the attitude of the eastern money market. He turned west for help, and it did not take him long to

realize that in Senator W. A. Clark, of Montana, was one of the richest men of America and one who was thoroughly and completely developed by and wedded to the West. The proposition was laid before him, appealed to his western pride as well as his sound business judgment. He sent railway and business experts into the field, and acting upon their reports, he agreed to finance the undertaking to the extent of at least twenty millions of dollars, if the people of Los Angeles would subscribe a million dollars worth of bonds, and the Terminal Company would allow itself to be absorbed by the new company. This was done, construction work begun and pushed rapidly and the first passenger trains of the Los Angeles and Salt Lake Route took possession of the rails between the two cities.

In regard to transcontinental business, the Salt Lake Route occupies a position of great strategic importance. Competing systems enter Salt Lake City from the east, the Union Pacific and the Rio Grande and Western. These connect at their eastern termini with all the great eastern systems running out of Omaha, Chicago, and St. Louis. Northward from Salt Lake City the Oregon Short Line connects with the Great Northern, the Northern Pacific, the Oregon Railway and Navigation Company's and the Canadian Pacific lines. While freight and passenger traffic from San Francisco and central California will always find the Ogden Route the quicker and more direct, equally so the Salt Lake Route affords the better route from Los Angeles and all southern California. And as the influx of tourists into southern California increases with remarkable volume each year the Salt Lake Route has already taken its place as the popular and most direct route, and it appeals equally strongly to those returning from its borders to the middle west, north and east.*

*Just as this volume goes to press the news comes that the Union Pacific Company has purchased the Salt Lake Route and made it an integral part of its system.

APPENDICES

I

THE ORGANIZATION OF THE MORMON CHURCH

It is a remarkable fact that the most complete and far-reaching — though by no means the largest — church organization in existence is the product of the brain of Joseph Smith, the prophet of Mormonism. Few outsiders, except those who live in close contact with it, have any conception of the great Mormon system of church government. It is exceptionally thorough, down to the minutest particulars. Nothing seems to have been overlooked; no essential point neglected. It is military-like in its attention to detail, and statesman-like in its appeal to the sense of responsibility in men, for thousands are made to feel the weight of official position and thereby rendered more careful in their daily walk and conversation. This is what so wise and conservative an observer as Bishop Tuttle of the Episcopal Church remarks about the Mormon system:

"Much satisfaction is thus given to the self-assertion, ambition, and desire for leadership, natural to man. There is strength in this. Furthermore, may it not be said, and might not bishops and rectors of our own Church be profited by taking heed to the saying, that the intelligent interest and loyalty and devotion of disciples are sure to be promoted by according to them some authority and devolving upon them responsibility."

It goes without saying, that Joseph Smith personally

disclaimed all credit or honor for the organization of this system.' To him and his followers it was a matter of revelation. In his *History of the Church* he explains how each step he took in the organization was guided and directed — revealed — by the Spirit of God, and he was but the humble instrument, the channel, through which the revelation came. Be that as it may, no one who studies it can fail to be deeply impressed by the wisdom manifested, and the high qualities of statesmanship it implies.

At first sight the organization seems to be somewhat complicated. This is because, in conjunction with the offices held, there are two priesthoods — those of Melchizedek and Aaron — to which all officers must belong. Hence it is essential first that the reader understand the significance of these two priesthoods. According to definitions given by the Mormon Church authorities, Priesthood is the power and authority given to men to act in the name of God, by which they can officiate in the ordinances of the gospel, for the benefit of their fellowmen. It also is to enable man to receive the ministration of angels and to enjoy the presence of God the Father, and His Son, Jesus Christ.

It should be remembered that the Mormon Church claims to be the one true church in that it *restores* — brings back to life — all the ordinances of God as instituted by Him from the beginning. Bible students will recall that the Old Testament speaks of the Melchizedek Priesthood, and later of the Aaronic or Levitical Priesthood. Early in the existence of the Mormon Church Joseph Smith restored these priesthoods, the former as the High or Holy Priesthood, and the latter as the Lesser Priesthood. Every officer of the Church, from the highest to the lowest, must be a member of one or the other of these priesthoods. For instance, in the Melchizedek Priesthood there are five primary officers, viz., (1) Apostle, (2)

Patriarch, (3) High Priest, (4) Seventy, and (5) Elder. Springing out of these in their proper order are various important and administrative offices, with corresponding officers. In the Aaronic Priesthood the four primary offices are, (1) Bishop, (2) Priest, (3) Teacher, and (4) Deacon.

GENERAL OFFICERS OVER ALL THE CHURCH

He only who has been ordained a High Priest of the Order of Melchizedek is eligible to be a member of the First Presidency, either as President or Counselor, a Prophet, Seer, Revelator or Translator.

APOSTLES

These are general officers of the whole Church, who, under the direction of the First Presidency build up the Church in all nations, and all must be elected as Apostles in the Melchizedek Priesthood, ere they can be recognized as having power and authority to be Prophets, Seers, or Revelators.

OFFICERS OVER THE STAKES

One must be a High Priest in the Melchizedek Order to be a President or Counselor of the Stake (for explanation of this term see later in this chapter).

THE SEVENTY

It will be recalled that the New Testament relates:

"After these things the Lord appointed other seventy also, and sent them two and two before his face into every city and place, whither he himself would come. Therefore said he unto them, The harvest truly is great, but the labourers are few: pray ye therefore the Lord of the harvest that he would send forth labourers into his harvest." (Luke 10:1,2.)

This "Seventy" has been restored by the Mormon Church to promulgate its doctrines and care for its work and interests at home and abroad. The Seventy act under

the direction of the Twelve Apostles, and preach in foreign fields. They also have the power to preside over the branches of the Church wherever founded, though, as a rule the Elders do that work in the home field. Hence the Seventy are regarded as general officers, while the Elders have but local authority.

ELDERS

These Elders are the standing ministers of the Church and have the authority to preside over any branch of the Church and of all church meetings.

KEYS OF THE PRIESTHOOD

One of the terms used by the Mormon Church is little understood by outsiders. It is the "Keys of the Priesthood." Jesus said to Peter, (see Matt. 16:19), "I will give unto thee the keys of the kingdom of heaven." Joseph Smith asserts that, by revelation, God gave again to the Mormon Church the "keys" of power, which, those, duly ordained, are able to use. Every office of the priesthood has its own peculiar keys or authority, but none may exercise this power unless he is duly called of God, either by direct inspiration, as was Adam, Enoch, Moses, or by the united voice of His authorized priesthood, (which, of course, to the Mormons, means their exclusive High Priesthood).

THE OFFICIALS IN THE MORMON CHURCH

Having thus made clear to the lay mind the significance of the priesthoods of the Mormon Church, let us now consider the *officials* who act in their varied capacities and exercise the authority of the various "keys," in the organization of the Mormon Church.

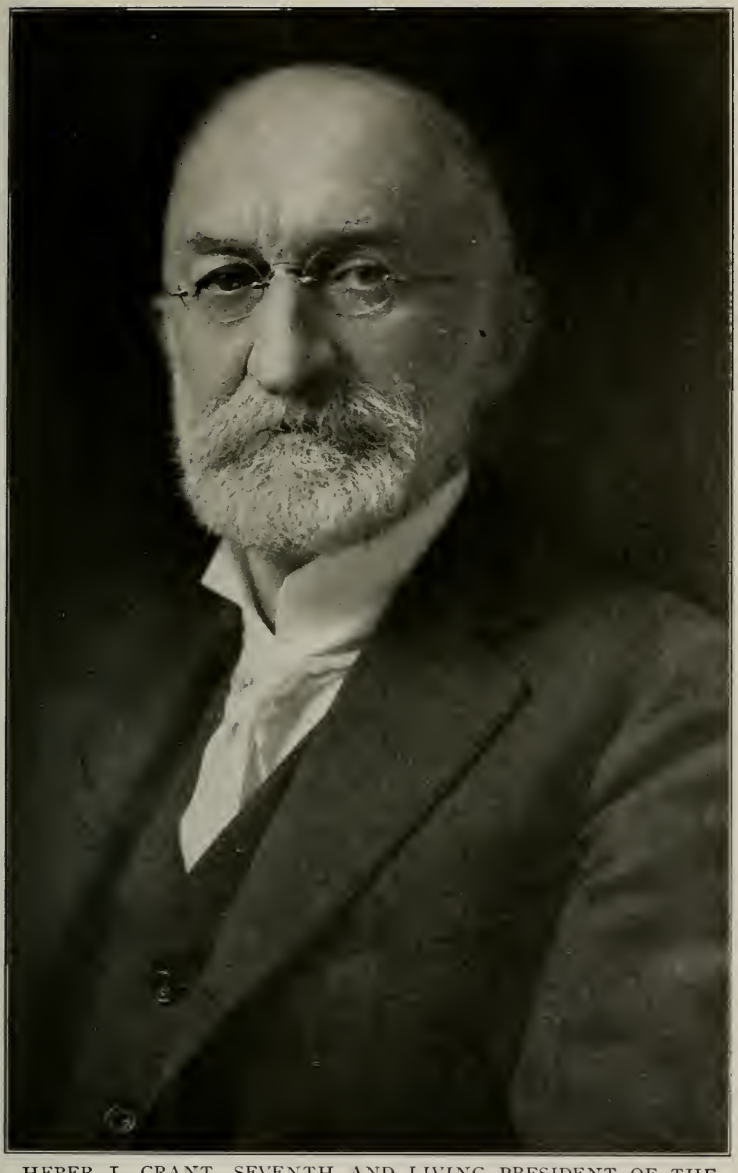
First Presidency. This is the highest presiding body of the Church. Joseph Smith was ordained the First President at Amherst, Ohio, January 25, 1832. Joseph claimed that he had received a revelation that Sidney

Rigdon and Frederick G. Williams should be appointed Presidents and Counselors of the High Priesthood to himself (Joseph) as President, and accordingly the following March (1833) they were duly ordained and set apart to this office.

The office of President remained vacant for some time after the murder of Joseph Smith, and the duty of presiding over the destinies of the Church fell upon Brigham Young, as the President of the Quorum of the Twelve Apostles, but on December 5, 1847, after the banishment from Nauvoo, while the Mormons were in Winter Quarters (the present city of Florence, Neb.), at a council held at the home of Elder Orson Hyde, Brigham Young was unanimously sustained as President. He then nominated as his Counselors Heber C. Kimball and Willard Richards. This action was duly sustained by the saints in general conference both at Council Bluffs in 1847, and the following year in Salt Lake City.

The following have held the office of President since the death of Brigham Young, viz., John Taylor, Wilford Woodruff, Lorenzo Snow, and Joseph F. Smith. The present president is Heber J. Grant, with Charles W. Penrose and Anthony W. Ivins as his two Counselors. These three officials comprise what is known as "The First Presidency," and in their office is the highest power of the Church of Latter-day Saints.

The Twelve Apostles. Even before the Mormon Church was organized it was pointed out that there should be a Council of Twelve Apostles, and in 1835, this important quorum was organized. In 1841, the Prophet Joseph, called upon this body to undertake their proper work and turned over to them much of the burden of the Church that, hitherto, he himself had borne. One of the chief callings of the apostle is to be a preacher of the word, everywhere and under all conditions. His jurisdiction is illimitable upon the earth, yet his power, his "keys of



HEBER J. GRANT, SEVENTH AND LIVING PRESIDENT OF THE MORMON CHURCH.

authority," cannot be exercised unless he is called to his work by the First Presidency through revelation. Yet he, like all the other authorities of the Church, must be approved by all the Church in conference assembled. This approval is termed "being sustained" by the Church.

The Seventy. The first Quorum of Seventy was selected by the Church in council, at Kirtland, Ohio, in February, 1835, from those who had proven their mettle, faith, courage and loyalty in going with the prophet to the aid of their persecuted brethren in Missouri. The purpose of the ordination of these seventies is to provide a large and well-trained army ready to go forth at the command of the First Presidency or the Twelve Apostles, and carry the teachings of the Church of Latter-day Saints to the farthest corners of the earth. If one Quorum of Seventy is not sufficient, other quorums can be organized (according to a revelation received by Joseph). As the work of these men is somewhat similar to that of the Twelve Apostles, they are sometimes honored with that name, yet their official power is less than that of the Twelve. At present there are two hundred and nine Quorums of Seventy in the entire Church throughout the world.

The Presiding Patriarch. In order that "blessings" may be given officially and authoritatively — even as a father, a patriarch, has the right, authority and privilege of blessing each member of his family — the Mormon Church, by revelation, has instituted this order of High Priests. Joseph Smith, Sr., father of the prophet, was the first to hold this important office in this dispensation. He was ordained December 18, 1833, by his son. The office of Patriarchs to the Church is hereditary, to be handed down from father to son, though no one may hold the office who has not been appointed and ordained by the First Presidency, and then sustained by the vote of the Church. When Presiding Patriarch Joseph Smith, Sr.,

died, his son Hyrum was called by revelation to succeed his father. After Hyrum's murder, William Smith, his brother, succeeded by virtue of his birthright, but later, having apostatized he was disfellowshipped. He was succeeded by John Smith, the brother of Joseph Smith, Sr., who acted until his death. John Smith, the oldest son of Hyrum Smith, was then ordained Presiding Patriarch. The present Presiding Patriarch is Hyrum G. Smith, the great grandson of Hyrum Smith.

Before discussing the Aaronic or Lesser Priesthood, it is well for the reader fully to understand what may be termed the governmental divisions of the Church. These are the "Stake" and "Ward."

The Stake. The word "Stake" was taken by the Mormon Prophet Joseph from the words of the Prophet Isaiah in such passages as:

"Look upon Zion, the city of our solemnities; thine eyes shall see Jerusalem a quiet habitation, a tabernacle that shall not be taken down, not one of the *stakes* thereof shall ever be removed, neither shall any of the cords thereof be broken." *Isa., 33:20.*

"Enlarge the place of thy tent, and let them stretch forth the curtains of thine habitation: Spare not, lengthen thy cords, and strengthen thy *stakes.*" *Isa., 54:2.*

Stakes, in Mormon phraseology, are subdivisions of the Church, for governmental purposes. For instance, in Salt Lake City alone there are four Stakes, viz., Ensign, Liberty, Pioneer and Salt Lake. Each Stake is presided over by a President and two counselors and a High Council consisting of twelve members with six alternate members. In some instances a Stake is co-extensive with the county, and may even include a greater area than is covered by the county.

The Ward. This is a smaller subdivision of the Church and is the unit of the Stake and may comprise any number of members. The Bishopric, comprising a bishop and

his two counselors, constitutes the presiding body in the Ward.

Branches are still smaller subdivisions of the Church and are generally established in localities where the members are few and living too far apart to sustain a *Ward* organization. *Conferences* and *Missions* are also subdivisions of the Church temporarily established in parts of the world where missionary work is being carried on.

SOVEREIGNTY OF THE CHURCH

The Mormons believe implicitly that God should be the acknowledged supreme authority of all the governments of the earth. Yet they realize and acknowledge that the Kingdom of God is not fully established upon the earth, for now, as in Christ's time, we are required to "render unto Caesar the things that are Caesar's" as well as "to God the things that are God's." But they also believe that when the King of kings shall come in the brightness of His glory He will mount the throne of His power and wield the scepter over earth's dominions as He now does in heaven. He is the Great Sovereign, from Him ultimately shall emanate all authority permitting men to rule among the nations.

Undoubtedly it is from the open promulgation of this belief, that the serious charge of disloyalty to the federal government was made. That there were clashes between federal *officials* and the Mormon authorities there is no question, but a careful study of all these differences will indicate that the Mormons were more sinned against than sinning, and that some of the men sent out to administer government and justice were neither competent nor wise. On the subject of polygamy the attitude of the Mormon Church was that it was not a matter in which state or federal government had the right to interfere. It was a matter of conscience, life, religion, and not until the Supreme Court of the United States finally, firmly and

fully upheld the law of Congress upon the subject did the Mormons yield and abandon the practice.

In Mormon Church government priesthood stands for authority. "The Melchizedek Priesthood holds the right of Presidency; and has power and authority over all the offices in the Church in all ages of the world," says the *Doctrine and Covenants*. But as this authority is conferred only by the power or command of God, the government of the Mormon Church may be called a *theocracy*, according to the belief of its members, as they are assured that their officials are called of God to officiate in His name and stead. Furthermore, the Mormons believe that their church is the leaven that shall leaven the whole lump of mankind and prepare it for the coming of Christ. In the words of President Wilford Woodruff:

"We believe this Church will prepare the way for the coming of Christ to reign as King, and that this Church will then develop into the Kingdom of God."

We have seen how the Melchizedek Priesthood conforms to this idea in the higher official work of the church. Let us now see how the Lesser Priesthood works.

THE LESSER OR AARONIC PRIESTHOOD

The Priesthood Conferred. While Joseph Smith was engaged in translating the *Book of Mormon*, with Oliver Cowdery as his scribe, on May 15, 1829, they went into the woods to pray and inquire of God respecting baptism, which they found mentioned on the golden plates. Joseph says:

"While we were thus employed, praying and calling upon the Lord, a messenger from heaven descended in a cloud of light, and having laid hands upon us, saying: 'Upon you, my fellow servants, in the name of Messiah, I confer the Priesthood of Aaron, which holds the keys of the ministering of angels, and of the Gospel of repentance, and of baptism by immersion for the remission of

sins; and this shall never be taken again from the earth, until the sons of Levi do offer again an offering unto the Lord in righteousness.'

"He said that this Aaronic Priesthood had not the power of laying on of hands for the gift of the Holy Ghost, but that this should be conferred on us hereafter; and he commanded us to go and be baptized, and gave us directions that I should baptize Oliver Cowdery, and afterwards that he should baptize me."

The messenger who visited them on this occasion, according to Mormon belief, was John the Baptist, and he then conferred upon Joseph and all who later should be called and ordained to the Aaronic Priesthood, the keys of the ministering of angels; the authority to preach the Gospel of repentance; and to baptize by immersion for the remission of sins. Later on, other revelations were given, conferring other powers which are now exercised by the priesthood.

The Presiding Bishopric. This bishopric, viewed as a whole, comprises the authority of and presidency over the Aaronic or Lesser Priesthood, who may officiate in all the temporal business affairs of the Church. They "hold the keys" to the Presidency of this Priesthood; this means that they have the right, power, and authority to *officiate* in *any* and *all* the offices belonging thereto, and also the right to *ordain* others to this ministry. It should be noted here, that, according to Exodus, 40:15, all the lineal descendants of Aaron are legally entitled to this office, but as God, in this latter-day dispensation, has not designated who are the "sons of Aaron," and has authorized the High Priests of the Order of Melchizedek to officiate in any of the lesser offices of the Church, this custom has been followed and doubtless will continue. Hence it will be seen that the First Presidency alone has the power to appoint a Presiding Bishop, though he must

be confirmed or sustained in the office by the whole Church in conference assembled.

Ward Bishops. Bishops of wards are selected as follows: The Stake Presidency chooses a suitable man and presents his name to the High Council for approval. If so approved the name is sent to the First Presidency, who, if satisfied of his fitness for the office, find out if he is willing to accept. If so, his name is presented to the ward, and on their vote being in his favor he is duly ordained. The First Presidency also has the power to appoint and ordain any person of its choice to this office. Each Bishop has two counselors.

Here, then, it will be seen that every *ward* has its own bishop. In Salt Lake City alone there are thirty-six wards, hence thirty-six bishops.

The Priest. The duty of the priest is to preach, teach, expound, exhort, baptize and administer the sacrament, visit the house of each member, and exhort them to pray vocally and in secret, and attend to all family duties. These duties imply considerable preparation for the preacher must know not only the Bible of the ordinary church-minister, but also the *Book of Mormon* and other works conveying the special doctrines of the Mormon Church. Then, too, he should be a man of prayer, and also of discretion and wisdom, for he is to call upon all the members and urge them to their religious duties. He must also know how to teach children in all good and holy things.

The Teacher. The teacher has many duties to perform. He is to watch over the Church and be with and strengthen its members always. He must *see* that there *is no iniquity* in the Church, so that he might aptly be called "the policeman of the Church." He must warn and counsel members against falling out, and seek to reconcile them to each other, as well as warn the liar of his evil. His duty is also to see that there is no "backbiting

nor evil speaking" — sins that poison the stream of brotherly love, undermine fraternal confidence, blacken innocent character, and canker the souls of those who are guilty of such meddlesomeness. He warns and rebukes the law-breakers; he exhorts and entreats the negligent; he counsels and persuades in the fear of the Lord; *and in order that he may more fully understand the spiritual condition of the members within his jurisdiction,* he is required to visit them in their homes.

He must also see that members partake of the sacrament, pay their tithes, refrain from speaking evil of the priesthood, keep holy the Sabbath day, and that they do no actual wrong. He must act as peacemaker and also warn, expound, exhort and teach, and invite all to come to Christ.

Quite a responsibility, requiring great care, wisdom and knowledge. These teachers are all under the control of the Ward Bishopric and are appointed to a certain district, or "block" in a city.

The Deacon. This is an officer whose chief work is to care for the poor, help in all efforts furthering the interests of the Church, and give what help he can to the teacher of his "block." The office may be regarded as a training school for the higher offices, aiding a young man to get a clear and comprehensive idea of the workings of the Church as a temporal and spiritual organization.

From this simple outline it will be seen that the Mormon Church is perfectly organized and with ramifications reaching to every home. The deacon, teacher and priest are required to keep in actual touch with every member and to report constantly to their ward bishop. These in turn report to the higher officers, so that the condition of the membership is well known to all the officials all the time. I know of no other church organization that is so complete, or that so effectively trains its members for the performance of the work of the Church.

In addition to the organization above described, there are church schools and auxiliary organizations under the control of the Church. These schools are scattered all over Utah and some are in Idaho, Arizona and Mexico. The other organizations are the Relief Society, Sunday School, Young Men's Mutual Improvement Association, Young Ladies' Mutual Improvement Association, the Primary Association, the Religion Class, all of them doing their allotted work effectively and with earnest sincerity, thus seeking still further to build up the power, and enlarge the boundaries, of the Church.

The Tithing System. Before leaving the subject of Mormon Church government it is imperative that the tithing system be explained. The prophet Joseph Smith gave to the Church the following revelation:

"Verily thus saith the Lord, I require all their surplus property to be put into the hands of the bishop of the Church of Zion.

"For the building of Mine house, and for the laying of the foundation of Zion, and for the priesthood, and for the debts of the presidency of My Church; and this shall be the beginning of the tithing of My people; and after that, those who have been tithed, shall pay one-tenth of all their interest annually; and this shall be a standing law unto them forever, for My holy priesthood, saith the Lord.

"Verily I say unto you it shall come to pass that all those who gather unto the land of Zion shall be tithed of their surplus property, and shall observe this law, or they shall not be found worthy to abide among you. And I say unto you if My people observe not this law to keep it holy, and by this law sanctify the land of Zion unto Me, that My statutes and My judgments may be kept thereon, that it may be most holy, behold, verily I say unto you, it shall not be a land of Zion unto you."

The good and conscientious Mormon, therefore, regards

tithing as mandatory and he gives up one-tenth of his income yearly. Temporal and spiritual blessings are promised, in accordance with such passages as are found in Malachi 3:10, 11, and all members of the Church are assured that while tithing is not sufficient to keep a man in the Church, he certainly cannot retain his standing to the end without it. No one is knowingly received into the Church who repudiates this doctrine, and of those already received who refuse the tithe payment it is said:

"To the non-tithe payer the doors of the Temple are closed, and the privileges of sacred ordinances cut off. On what ground can one claim the right to be trusted with the most sacred and spiritual privileges of the kingdom, when he is not true to his trust in material things? How can one claim the blessings of the Temple if he refuses to build and maintain it?"*

The Church teaches that apostasy is the inevitable end of persistent non-tithe paying, though there may be no formal action taken against the disobedient member. Spiritual laws work automatically. On the other hand, those who regularly and honestly pay their tithes are building up their spiritual character in a variety of ways that any thoughtful person may speedily realize.

In the early days, when money was scarce and the major part of the members were tillers of the soil, most of the payments were made "in kind." One could see the farmers drive in to the old tithing-house that used to stand where the magnificent Hotel Utah is now located, bringing a sheep, perhaps, a side of beef, hams, bacon, salt pork, grain of every kind, beans and other legumes, eggs, poultry, butter, fruit and vegetables of all sorts, the products of the looms, wool, jams, jellies, preserves, and all and everything that a self-sustaining people were likely to produce. All these goods were duly credited to the persons bringing them and receipts given.

*_Tithing_, by George H. Brimhall, President Brigham Young University, Provo, Utah.

Then another interesting phase of the Mormon method of those early days was witnessed. Workmen were often paid in script on the tithing-house and men and their wives would often anxiously wait for hours to see if those goods came in that they desired.

Of late years the tithing has been mainly paid in cash, and from the proceeds, the various temples, tabernacles, churches, schools, academies, etc., erected and sustained. Two of the products of tithing are the pride not only of Salt Lake City, but of the whole West. These are the Mormon Temple, fully described in the chapter on Salt Lake City, and the magnificent, dignified and stately office building of the Church on South Temple Street. This is a simple structure of granite, of classic Greek type, perfect in proportion, impressive from all view-points, admirably adapted for the work of the Church, and naturally, the especial pride of every Mormon not only in the state, but throughout the world.

II

THE PECULIAR DOCTRINES OF MORMONISM

We have seen elsewhere that the mere preaching of Mormonism seems to have aroused bitter antagonisms that later developed into cruel persecutions. The Mormons claim the reason for this to be that the Powers of Evil, knowing that God had inspired this Church to dispense His kingdom upon earth in these latter-days, were thus aroused to fight to the bitter end to preserve their power over the hearts of men.

There is nothing peculiar, in one sense, in the claim made by the Mormons that theirs only is the true Church. This is the claim made by the Jews, the Catholics, the Episcopalians, the Mahomedans, the Christians (Campbellites), the Seventh-Day Adventists and a score of others. But there are peculiar features about this claim when put forth by the Mormons that have aroused the intense antagonisms of the other churches. The Mormons deny that it is merely another "sect," and assert that it is *an original creation, established upon the earth in this age as a restoration.*

Other churches have their power and authority *handed down* from some earlier authority, the Roman Catholics, for instance, claiming to date dack to the Apostle Peter. On the other hand, the Mormons assert that their Church and its priesthood were reëstablished on earth by Christ in this "latter-day," hence their full name and title: The Church of Jesus Christ of Latter-day Saints.

In 1841, the following *Articles of Faith* were promul-

gated by Joseph Smith, adopted in conference, and have ever since been set forth as stating the belief of the Mormons:

"1. We believe in God, the Eternal Father, and in His Son, Jesus Christ, and in the Holy Ghost.

"2. We believe that men will be punished for their own sins, and not for Adam's transgression.

"3. We believe that, through the atonement of Christ, all mankind may be saved, by obedience to the laws and ordinances of the Gospel.

"4. We believe that the first principles and ordinances of the Gospel are: First, Faith in the Lord Jesus Christ; second, Repentance; third, Baptism by immersion for the remission of sins; fourth, Laying on of Hands for the Gift of the Holy Ghost.

"5. We believe that a man must be called of God, by prophecy, and by the laying on of hands, by those who are in authority, to preach the Gospel and administer in the ordinances thereof.

"6. We believe in the same organization that existed in the primitive Church, namely, apostles, prophets, pastors, teachers, evangelists, etc.

"7. We believe in the gift of tongues, prophecy, revelation, visions, healings, interpretation of tongues, etc.

"8. We believe the Bible to be the word of God, as far as it is translated correctly; we also believe the *Book of Mormon* to be the word of God.

"9. We believe all that God has revealed, all that He does now reveal, and we believe that He will yet reveal many great and important things pertaining to the Kingdom of God.

"10. We believe in the literal gathering of Israel and in the restoration of the Ten Tribes. That Zion will be built upon this (the American) continent. That Christ will reign personally upon the earth, and that the earth will be renewed and receive its paradisical glory.

"11. We claim the privilege of worshiping Almighty God according to the dictates of our own conscience, and allow all men the same privilege, let them worship how, where or what they may.

"12. We believe in being subject to kings, presidents, rulers and magistrates, in obeying, honoring and sustaining the law.

"13. We believe in being honest, true, chaste, benevolent, virtuous, and in doing good to all men; indeed we may say that we follow the admonition of Paul: 'We believe all things, we hope all things,' we have endured many things, and hope to be able to endure all things. If there is anything virtuous, lovely, or of good report or praiseworthy we seek after these things."

To this declaration of faith many Christian churches could pledge their allegiance, hence if the Mormons have peculiar beliefs they must be found in their doctrinal teaching. This, we find, emphasizes Article 9, in that the Mormon Church believes implicitly in present-day revelations. Joseph Smith received them constantly, and the Church is ready at any time to accept future revelations.

In the chapter devoted to the organization of the Church I have discussed their beliefs as to the restoration of the Melchizedek and Aaronic Priesthoods, and the chapter on Polygamy has presented that now obsolete practice.

In the chapter on Joseph Smith his account of the origin of the *Book of Mormon* was given. There have been several theories propounded by the enemies of Mormonism to account for it in other ways. They are all found to be pure concoctions on the part of their authors, though the so-called Spaulding theory is interesting enough to deserve a few lines of elucidation and explanation. Spaulding, a well-educated man, a graduate of Dartmouth College, came to live on Conneaut Creek, Ohio, in which region were many mounds and other evi-

dences of a prehistoric civilization. His business not prospering, he returned to literature as a recreation and wrote a book, using the same fiction that Sir Walter Scott, Mark Twain, and a score of other eminent authors have done, namely, that he had found the manuscript buried in some cave or other and had merely translated or transcribed it. Hence the title of his book was known as *Manuscript Found,* and the subject dealt with was the supposed life of the prehistoric inhabitants of the region.

When the *Book of Mormon* was published there were various claims made that it was neither more nor less than Spaulding's book, with a few additions of religious and doctrinal matter. But how had the Prophet Joseph Smith secured the book? Some said he had worked at a place that enabled him to steal the manuscript from a trunk in which it had been placed after Spaulding's death; another that Sidney Rigdon had borrowed and copied the manuscript from a Mr. Lambdin, who was an employee in Patterson's printing and publishing establishment, where it had been brought " to be passed upon." After the apostasy of Doctor Philastus Hurlburt and his vindictive persecutions of Joseph Smith began, he secured a large number of affidavits from neighbors of Spaulding's who had heard parts of the manuscript read, and all of whom claimed, in effect, that the Spaulding book and the *Book of Mormon* were, to say the least, suspiciously alike in matter, the names used, and in phraseology. Later Hurlburt secured from Spaulding's widow the manuscript itself, according to his and her own statements, with the intention of publishing it to the world and thus demonstrating Joseph Smith's theft and imposture. But though E. D. Howe, of Painsville, Ohio, — the publisher of all Hurlburt's fulminations with additions of his own, in a book entitled *Mormonism Unveiled,*— was as anxious as was he to present so convincing a proof of Joseph's duplicity, it was found, when

the manuscript was read, that it was nothing like what it was purported to be, hence could not be used. This manuscript — the only one Spaulding is known to have written — was left by Hurlburt, according to his own statement, with Mr. Howe, "with the understanding that when he had examined it he should return it to the widow. Said Howe says the manuscript was destroyed by fire"— anyhow, the widow never saw it again, and for years it was deemed lost.

Strange to say, it was left for President Fairchild, of Oberlin College, Ohio, the stalwart institution of an almost rigid and orthodox puritanism, to unearth the long-lost manuscript and demonstrate the falsity of the Spaulding theory. In about 1839 or 1840, a Mr. L. L. Rice purchased the newspaper and plant of Mr. E. D. Howe, the publisher of *Mormonism Unveiled.* In connection with the printing plant was a large library of books and manuscripts. Some years afterwards Mr. Rice sold the printing plant, but removed all his books and manuscripts (including those purchased from Howe) to Honolulu, Hawaii, where he made his residence. In 1884 President James H. Fairchild visited him, and being anxious to secure early Ohio manuscripts, especially those on anti-slavery, for his college library, urged Mr. Rice to go over his collection and donate what he could for that purpose. Now let Dr. Fairchild tell his own story. It was published at Oberlin, Ohio, in the January issue, 1885, of the *Bibliotheca Sacra*:

". . . In pursuance of this suggestion Mr. Rice began looking over his old pamphlets and papers, and at length came upon an old, worn, and faded manuscript of about one hundred and seventy-five pages, small quarto, purporting to be a history of the migrations and conflicts of the ancient Indian tribes which occupied the territory now belonging to the states of New York, Ohio, and Kentucky. On the last page of this manuscript is a

certificate and signature giving the names of several persons known to the signer, who have assured him that, to their personal knowledge, the manuscript was in the writing of Solomon Spaulding. Mr. Rice has no recollection how or when this manuscript came into his possession. It was enveloped in a coarse piece of wrapping paper and endorsed in Mr. Rice's handwriting, 'A Manuscript Story.'

"There seems to be no reason to doubt that this is the long-lost story. Mr. Rice himself and others compared it with the *Book of Mormon* and could detect no resemblance between the two, in general or in detail. There seems to be no name or incident common to the two. The solemn style of the *Book of Mormon,* in imitation of the English Scriptures, does not appear in the manuscript. The only resemblance is the fact that both profess to set forth the history of the lost tribes. *Some other explanation of the origin of the Book of Mormon must be found if any explanation is required.**

(Signed) JAMES H. FAIRCHILD."

This manuscript is now to be seen by any accredited person in the Oberlin College library. A copy was made from it by President Joseph F. Smith, who in 1884 was residing in the Sandwich Islands, and in 1886 this was published by the *Deseret News* — exactly according to the transcript, with all its errors of grammar and orthography, as also with all the alterations, erasures, etc., made by its author, indicated. This certainly does not appear as if the Mormons had anything to hide in regard to the Spaulding manuscript or theory.

If the reader is interested in conjecture, there are many others presented by various authors as to the origin of this book. To these he is referred.

But there are beliefs that are peculiar to Mormonism.

*The italics are mine. George Wharton James.

JOSEPH F. SMITH, SIXTH PRESIDENT OF THE MORMON CHURCH.

One of these is "Baptism for the Dead." To hundreds of thousands of orthodox Christians it has been a serious question as to what became of those who died prior to the coming of Christ, or who, after His coming, never heard of Him and therefore could not "believe on Him and be saved." Joseph, the prophet, had a revelation in June, 1836, making it clear that all such, as well as children who die before arriving at the years of accountability, *who would have received the Gospel with all their hearts* had it been possible, shall be heirs of the Celestial Kingdom. On January 19, 1841, another revelation was received urging the people to complete the Temple that, among other needful things, there might be erected a font where the ordinance of baptism for the dead might be performed. Henceforth the prophet and leading elders often expounded this doctrine and showed that by it the holy ministrations of the saints could affect all the generations of the past as well as those which were to come. To an impressionable people it can well be seen what a wonderful vista this opened up. The Mormons quote such passages as the following to show that the dead can be preached to and saved:

"Verily, verily, I say unto you, the hour is coming, and now is, when the dead shall hear the voice of the Son of God; and they that hear shall live,— *John 5:25.*

"Who shall give account to Him that is ready to judge the quick and the dead. For, for this cause was the gospel preached also to them that are dead, that they might be judged according to men in the flesh, but live according to God in the spirit.— *1 Peter 4:5* and *6.*

"Else what shall they do which are baptized for the dead, if the dead rise not at all? Why are they then baptized for the dead?"— *1 Cor. 15:29.*

This doctrine has been much emphasized, and the Mormons have faithfully observed it, being baptized for their dead that the latter might be saved.

The Mormons also believe that in the future life there are grades of happiness and misery — that all men are not alike either happy or wretched, but they are rewarded according to their works.

Another peculiar doctrine of Mormonism, which many have confounded with polygamy, is *Celestial Marriage*. The Mormons show that, according to the ritual used, the Christian Churches marry only "until death doth part." They claim, however, that their priesthood has the power to seal for eternity as well as for time, and that *real* marriage is an eternal relationship. And they further believe that, where no marriage for eternity has taken place, and been solemnized in their duly appointed temples, and by their duly appointed priesthood, the heavenly condition of those thus unmarried for eternity is lower than that of those who have been married for eternity.

As has been shown elsewhere the Mormons believe that America is the place of the New Jerusalem, the country in which Zion shall be established,— somewhere in the western part. And that Christ shall appear in Zion and there shall be a general resurrection of the righteous dead, after which the era of peace shall be established and Christ shall reign among men in visible presence.

In order to provide for the needs of the Church, the Mormons believe in the payment of tithes. They bring one-tenth of their annual increase and dedicate it to the service of the Lord.

The Mormons also believe that man, even in his physical body, is created in the image and likeness of God, and furthermore, that man has the power to attain to the divine estate. This leads to another belief, viz., that God is but exalted man. The Church teaches that:

"God himself was once as we are now, and is an exalted man, and sits enthroned in yonder heavens. That is the great secret. If the veil was rent today, the Great

God who holds this world in its orbit, and who upholds all worlds and all things by His power, was to make Himself visible — I say, if you were to see Him today, you would see Him like a man in form — like yourselves in all the person, image, and very form as a man; for Adam was created in the very fashion, image, and likeness of God, and received instruction from, and walked, talked and conversed with Him, as one man talks and communes with another."

Thus, it will indeed be seen that, in their beliefs, the Mormons are what they claim to be, a peculiar people.

III

THE MORMON MISSIONARY SYSTEM

Few people outside of the Mormon Church have any idea of the extent, the methods and the work of the Mormon missionary system. While the fearful persecutions were going on in Missouri, and the days of the saints in Ohio were being numbered, the organization of the Church was enlarged by the ordination of a Quorum of Twelve Apostles, and two Quorums of Seventy.* As a natural sequence enlarged operations became essential, and to those who recognize the claims of the Mormon Church, it will be evident that nothing less than an attempt at world-wide missionization could be attempted. As one historian of the Church has written:

"The Church of Jesus Christ of Latter-day Saints was never intended to be merely an American sect of religion — the Dispensation of the Fullness of Times, the dispensation into which will be gathered all former dispensations of the Gospel of Christ, all keys of authority, all powers, all gifts, all graces essential to the welfare and salvation of men — all that is essential to the completion of the mission of the Christian religion. The mission of the Church in such a dispensation is general, not local, world-embracing. Had it been less than one of the world's great movements, Mormonism had been inadequate to the world's needs — less than sufficient for the world's redemption."

*The term "quorum," used frequently in the foregoing pages, has a peculiar and distinctive use in Mormon phraseology. It is thus defined in the *Standard Dictionary:*
"4. Mormon Church. A council or an organized body; as, an elders' *quorum;* the *quorum* of the First Presidency."

MORMON TEMPLE, MANTI.

It matters not whether we — you, my reader, and I — believe in the Mormon Church or its mission, or not, it is evident we cannot understand its actions unless we are acquainted with the mental and spiritual well-springs of those actions. In the above they are revealed to us. How, then, do they work out?

Believing as they do that their's is the one divinely-appointed Church into which all men should be gathered,* it is the policy of the Mormon Church to send forth every man member, as early in his religious life as possible, to be a missionary of the faith. These men, like the apostles of old, must go when and where commanded, not reluctantly and with anger, but eagerly, gladly and in the spirit of willing obedience. Where practicable they must go in the fashion prescribed by Christ,— without purse or scrip — trusting absolutely in the Lord for the supplying of all their needs, but when laboring in the cities and large towns missionaries have to be provided with money or, under the law, they would be arrested as vagrants. Traveling "without purse or scrip" and relying entirely upon the people for the actual necessities of life is the ideal condition, and this obtains in many of the missions; yet, as stated, it is not universal.

But, asks my reader, do these men go when thus commanded? Do they obey the orders of their Church superiors? As far as I can learn there is and always has been an almost perfect obedience to this requirement. Men of business, of large affairs, have left everything at the call of the Church, and have gone out to be street preachers, house to house canvassers and distributors of literature, and for one, two and even six and seven years have remained where sent, faithfully discharging the duties imposed upon them.

*Though they thus hold, the Mormons also believe that at the time of the Lord's advent (yet in the future) the Church will be relatively small in numbers.

No one can accuse Bancroft of favoring the Mormons, yet this is what he says of the missionaries:

"In their missionary adventures no sect was ever more devoted, more self-sacrificing, or more successful. The Catholic friars in their new-world excursions were not more indifferent to life, wealth, health, and comfort, not more indifferent to scorn and insult, not more filled with high courage and lofty enthusiasm, than were the Mormon elders in their old-world enterprises. In all their movements they were circumspect, moderate, studying the idiosyncrasies of the several nations in which they labored, and careful about running unnecessarily counter to their prejudices.

"On reaching the scene of his labors, the missionary earned his daily bread by some trade or handicraft, not even refusing domestic service, in order to provide for his wants, and meanwhile studying the language of the people among whom he lived. Many were cast into dungeons, where they were forced to live on bread and water; many traveled on foot from district to district, with no other food than the roots which they dug near the wayside; many journeyed under the rays of a tropical sun, the water trickling from the rocks and the berries hanging from the bushes, forming at times, their only subsistence.

"The term of their labors had no certain limit, depending entirely upon the will of the first presidency. For the more distant missions it was seldom less than two years or more than six. They must remain at their post until ordered home; and when recalled, they were often forced to earn by their own labor the means of crossing seas and deserts. Restored at length to their families, they were ready to set forth at a day's notice to new fields of labor; and for all this self-denial they sought no earthly reward, esteeming it as their greatest privilege, thus to give proof of their unfailing devotion to the Church."*

**History of Utah.* By H. H. Bancroft.

Having spoken several times to Mormon assemblies while I was in Salt Lake City, many thousands of the members of the Church came to know me, hence I was often addressed by those whom otherwise I should not have known. This gave me some interesting experiences, and led to the obtaining of knowledge I was anxious to gain. One day I was in a baker's establishment. It was early in the morning before the usual sales-clerks had arrived. Accordingly a young man came out from the bakery itself to wait upon me. We entered into conversation. Though yet certainly not more than thirty, he informed me that he had been sent "on mission." For two years he was an itinerant missionary, preaching from Minneapolis, down into the South, through Tennessee, and finally returning via St. Louis.

Another young man, whom I saw almost daily, was a reporter on the staff of the Salt Lake Tribune. Quick, mentally alert, well educated, above the average of cub reporters, he wrote not only detailed matter, but often got in a special both for his own and other papers. He could not be much over twenty. Yet he told me with unconcealed joy and exultation that his Church had chosen him to go on a mission to England, especially to combat some particularly vicious and lying propaganda against Mormonism that was now rife. Here was no regret, no facing an unpleasant task unwillingly, but the proud consciousness that he was deemed worthy the trial, the testings, the difficulties, the hardships he would have to endure, and all for the glory of God and His Church.

Another of my Mormon friends was engaged at a high salary, with commissions, in one of the leading real estate offices in Utah. He was quite a student, especially of local Mormon history, had been on a prolonged mission through several of the adjoining states, and withal, was a young man of considerable literary talent. While engaged in this highly profitable business the authorities

of the Church were called upon for a man to assist in preparing the history of the Mormon Church in an adjoining state. My friend was appointed to the task. In less than one week, he and his wife and children had packed up, left the home they owned and had made comfortable by their own efforts, and were located in lodgings in another state, and promised a salary of less than one-third the amount he had been receiving.

This is missionary self-abnegation, and certainly a pretty strong proof, it seems to me, of the Mormon's belief in his religion and his ready acquiescence in what he is taught is God's will concerning his duty towards the rest of mankind.

Men are sent to Europe, to Asia, to Australasia and to Africa, and thousands of them are now in foreign stations, preaching the Gospel as they believe it.

The spirit of the true Mormon missionary is well set forth in the following poem, by W. W. Phelps, one of the writers of early day Mormonism:

"The gallant ship is under weigh
To bear me off to sea,
And yonder floats the streamer gay
That says she waits for me.
The seamen dip the ready oar,
As rippled waves oft tell,
They bear me swiftly from the shore;
My native land, farewell!

"I go, but not to plough the main,
To ease a restless mind,
Nor yet to toil on battle's plain,
The victor's wreath to find.
'Tis not for treasures that are hid
In mountain or in dell,
'Tis not for joys like these I bid
My native land, farewell!

"I go to break the fowler's snare,
To gather Israel home;
I go, the name of Christ to bear
In lands and isles unknown.
And soon my pilgrim feet shall tread
On lands where errors dwell,
Whence light and truth have long since fled,
My native land, farewell!

"I go, an erring child of dust,
Ten thousand foes among,
Yet on His mighty arm I trust,
Who makes the feeble strong.
My Sun, my Shield, forever nigh—
He will my fears dispel,
This hope supports me when I sigh,
My native land, farewell!

"I go devoted to His cause,
And to His will resigned;
His presence will supply the loss
Of all I leave behind.
His promise cheers the sinking heart
And lights the darkest cell,
Exiled pilgrim's grace imparts;
My native land, farewell!

"I go, it is my Master's call,
He's made my duty plain;
No danger can the heart appall
When Jesus stoops to reign.
And now the vessel's side we've made,
The sails their bosoms swell,
Thy beauties in the distance fade,
My native land, farewell!"

THE END

BIBLIOGRAPHY

Bailey, Mrs. Florence Merriam: My Summer in a Mormon Village.

Bancroft, H. H.: History of Utah.

Beadle, J. Hanson: Western Wilds and the Men Who Redeemed Them: Life in Utah.

Bonner, Geraldine: Tomorrow's Tangle.

Brown, Paula: The Mormon Girl.

Burton, Robert F.: The City of the Saints.

Campbell, James (Publisher): History and Philosophy of Marriage.

Cannon, Frank J., and Knapp, George L.: Brigham Young and His Mormon Empire.

Carleton, A. B.: The Wonderlands of the Wild West.

Carmichael, Sarah E.: Poems.

Curwood, James Oliver: The Courage of Captain Plum.

Dellenbaugh, F. S.: A Canyon Voyage: The Romance of the Colorado River.

Dickenson, Mrs. Ellen: New Light on Mormonism.

Dixon, William Hepworth: Spiritual Wives.

Doyle, Conan: A Study in Scarlet.

Dutton, Clarence E.: Geology of the High Plateaus of Utah: Physical Geology of the Grand Canyon District: Tertiary History of the Grand Canyon District.

Gilbert, G. K.: Geology of the Henry Mountains: Lake Bonneville.

Grey, Zane: The Rainbow Trail: Riders of the Purple Sage.

Hadley, Albert Whipple: Mormon Rhymes.

Henry, J. H.: By Order of the Prophet.

Inman, W. H., and Cody, W. F.: The Great Salt Lake Trail.

James, George Wharton: Reclaiming the Arid West: Indian Blankets and Their Makers; etc.

Macomb, Major: Exploring Expedition from Santa Fe to the Junction of the Green and Grand Rivers, 1859.

Marryat, Captain: Monsieur Violet.

Mead, Elwood: Report on Irrigation Investigations in Utah.

Miller, Joaquim: The Danites.

Pidgin, Charles F.: The House of Shame.
Powell, John Wesley: Geology of the Uinta Mountains: The Canyons of the Colorado: Lands of the Arid Region.
Remy and Brenchley: A Journey to Great Salt Lake City.
Riley, L. Woodbridge: The Founder of Mormonism.
Russell, Isaac: Lake Lahontan.
Simpson, Captain J. H.: Explorations Across the Great Basin of Utah in 1859.
Smith, Joseph F.: Book of Mormon: Word of Wisdom.
Smythe, William E.: The Conquest of Arid America.
Stansbury, Howard: Explorations and Surveys of the Valley of the Great Salt Lake of Utah in 1849.
Stenhouse, T. H. B.: The Rocky Mountain Saints.
Stenhouse, Mrs. T. H. B.: Tell It All.
Talmage, James E.: Mormon Articles of Faith: The Vitality of Mormonism.
Webb, Robert C.: The Real Mormonism.
Widtsoe, John T.: Dry Farming in Utah.
Wilson, Harry Leon: The Lion of the Lord.

INDEX

Titles of Chapters are in small capitals

A

Aaronic Priesthood, 52, 329 *et seq.*, 336.
Abajo Mtns., 36.
Academy of Arts, Deseret, 294.
Acknowledgments, xii.
Adams, Mrs. Annie, 143.
Maude, 143.
Agassiz, Mt., 230.
Agriculture, 6.
Alkali Canyon, 36.
Allen, Charles, 56.
America, The Home of Zion, 350.
Americana Magazine, (q.) 48.
American Fork Canyon 4.
River, 226.
ANCIENT INHABITANTS OF UTAH, 31-46.
Angel's Landing, 299.
Animas Ruins, 32.
Antelope Island, 12.
Apostle, 329 *et seq.*
The Twelve, 332.
Appeal to the President, Mormons, 63.
Aquarius Plateau, 220.
Arid Region, Lands of the, 196.
Armstrong Canyon, 240.
Arrowhead Trail, 24.
Articles of Faith, 131, 343.
Artifacts, Ancient, 40.
Art Development, 288.
ARTISTS AND SCULPTORS OF UTAH, 288-307.
Ashley National Forest, 218.
Assay Creek Springs, 232.
Assembly Hall, 312.
Atwood, Wallace W., (q.) 158.
Audubon Warblers, 248.
Augusta Bridge, 239.
Authority of Priesthood, 336.

B

Babbitt, A. W., Delegate, 109.
Bailey, Florence Merriam, 280.
Bald Mountain, 230.
Bamberger, J. A., 209.
Bancroft, H. H., (q.) 69, 95, 112, 354.
Baptism for the Dead, 349.
Basin, Great, 2, 3, 24.
Wyoming, 5.
Basketry, Ancient, 40.
Battle Creek, 109.
Bauchmin's Creek, 8.
Bear Lake, 216, 224.
River, 5.
Beehive House, 319.
Bennett, John C., 74.
Bierstadt, Albert, 288.
Big Mountain, 8.
Bingham Canyon, 16, 211.
Bird Island, 253.
BIRD LIFE IN UTAH, 246-259.
Bird Sanctuaries, 259.
Bishop, George, 32.
Bishopric, Presiding, 337.
Bishops, Ward, 338.
Blackbirds, 247.
Redwinged, 251.
Blanchard, C. H., 208, 299.
Blasting at Copper Co., 17.
Blossoming Valley, Utah Land of, x.
Blue Bell Mine, 209.
Blue Springs, 232.
Boastful Daffodil, The, 268.
Boggs, Lilburn W., 56, 69, 73.
Bonner, Geraldine, 277.
Bonneville, Capt., 155.
Lake, 3, 156, 273.
Book Cliff Coal Fields, 214.
Book of Mormon, 345.
On Polygamy, 119.

National Parks, 183.
Bountiful, 109.
Bowery, 137, 313.
Bowles, Samuel, (q.) 7.
Bowring, Mrs. 139.
Boy Scouts, Dr. Plummer with, 261.
Branches of Mormon Church, 335.
Brant, Black, 258.
Brassfield, Newton, Murdered, 117.
Brenchley, Julius, 273.
Bridger, Fort, 105, 113.
BRIDGES, NATURAL, OF UTAH, 235-245.
Discovered, 238.
Brighton, 228.
Brocchus, Associate Justice, 110.
Brown's Hole, 27.
Brimhall, Geo. A. Pres., (q.) 341.
BRYCE CANYON, AN AMPHITHEATER OF EROSION, 193-4, 231.
Buchanan, Pres., 111, 114.
BUILDING A STATE, 107-118.
Bull, W. H., 186.
Buncombe Mob, 70.
Burton, Robt. F., (q.) 8, 122, 273.
Butcher Bird, 250.

C

Cable in Zion Canyon, 186.
Cache Cave, 19.
National Forest, 218.
Caine, John T., 139.
Cannon, Frank J., (q.) 84, 92.
Geo. Q. (q.), 133.
Tracey Y., 315.
Canyon, American Fork, 4.
Alkali, 36.
Big, 10.
Bingham, 16.
Brigham's, 12.
Chaco, 31, 38.
City Creek, 14.
Colorado, 272, 273.
Coon's, 12.
Cottonwood, Big, 14, 228.
Little, 14, 228
Devil, 36.
Echo, 11, 18.
Emigration, 8, 11, 13, 14.
Grand, Physical Geology of, 273.
Hatchberry, 41.
Long, 36.
Mill Creek, 14.
Nine Mile, 31.
Parley's, 14.
Square Tower, 41.
Weber, 21.
Carbonate Mine, 207.
Carbon County, 31.
Carlton, A. B., 275.
Carmichael, Sarah, 274.
Caroyln Bridge, 239.
Carrying Companies, 109.
Carthage, 75, 76, 77, 98, 99.
Castles, Ancient, 41.
Hovenweap, 41.
Valley Coal Fields, 214.
Cave Dwellings, 31 *et seq.*
Cedar City, 24, 114, 232.
Tree's Love, 286.
Valley, 270.
Celestial Marriage, 350.
Centennial—Eureka Claims, 208.
Centerville, 109.
Central Pacific Ry., 324.
Chaco Canyon, 31, 38.
Mesa, 31.
Chickadee, 248, 252.
Church, Sovereignty of the, 335.
City of the Saints, (q.) 8, 273.
Clark, Genl., 70.
Clarke, Senator W. A., 327.
Clawson, Hiram B., 137.
Clayton, Prof., 208.
Cliff Dwellings, 31 *et seq.*
Climate of Utah, ix, 6.
Clive, C., 139.
Coal Fields, 214.
Cody, Col. W. F., 281.
Colfax, Schuyler, 7.
Colob Plateau, 179.
Colorado, Canyons of the, 272, 273.
River, 5, 214.
COLOSSAL NATURAL BRIDGES OF UTAH, 235-245.
Conan Doyle, (q.) 277.
Conferences of the Church, 335.
Confessions, J. D. Lee's, 277.
Congress Memorialized, 109.

Connor, Col. P. E., 116, 207.
Cotton Grown in Utah, 232.
Cottonwood Canyon, Big, 14.
Little, 14.
Council Bluffs, 101.
Country Life in America, (q.) 253.
Courage of Capt. Plum, 279.
Cowdery, Oliver, 52, 68.
Creeper, Brown, 248.
Crittenden, Fort, 116.
Cruising among the S. L. Islands, 282.
Culmer, Harry L. A., 275, 288 *et seq.*, 318.
Cummings, Dr. Byron, (q.) 31, 35, 43, 242 *et seq.*
Melvin Earl, 305.
Cumorah, 51.
Curwood, James Oliver, 279.

D

Daffodil, The Boastful, 268.
Dallin, Cyrus, 208, 279, *et seq.*, 319.
Dandy Crossing, 238.
Danites, 276.
Deacon, Office of, 339.
Delegate Babbitt, 109.
Delienbaugh, F. S., 24, 178 *et seq.*
Denver & Rio Grande Ry., 325.
De Lamar, Col. J. R., 211.
Derr, Wm., 139.
Deseret Academy of Arts, 294.
News, 348.
Territory of, 109.
Desert of S. E. Utah, 22.
Chipping Sparrow, 250.
Horned Lark, 249.
Sage Thresher, 250.
Sparrow, 250.
Devil's Canyon, 36.
Slide, 168.
Dinah Creek Pass, 164.
Dinosaur National Mon., 164.
Dixieland, 232.
Dixie Natl. Forest, 232.
-Sevier Natl. Forest, 232.
Dixon, Wm. Hepworth, 280.
Doctrines, Peculiar of Mormonism, 343-351.
Dominguez, Padre, 42.
Donahue, Owen, 209.
Doniphan, Genl., 71.
Douglas, Stephen A., 73.
Douglas, Fort, 309, 320.
Doves, Mourning, 248.
Doyle, Conan, 277.
Drainage of Utah, 5.
Drama in Utah, 138.
Drive Out the Mormons, 98 *et seq.*
Dry Farming, 6.
Duck Springs, 232.
Dutton, Clarence E., (q.) 23, 160, 170-192, 272.

E

Eagle, 250.
Gate, 319.
Mine, 209.
Echo Canyon, 11, 18.
Education in Utah, 146-154.
and Brigham Young, 146.
Elders in the Church, 330.
Ellen Peak, 163.
Ellsworth, Mt., 163.
Emigration Canyon, 8, 11, 12.
Emma Mine, 207.
England, B. Young in, 93.
Escalante Desert, 3.
Padre, 42, 271.
Experimental Station, 223.
Exploring Expedition, Macomb's, 28, 271.
Across Great Basin, 270.
Colorado River, 171.
Great Salt Lake, 269.
Eureka Hill Mine, 208.
Expositor, The, 76.
Ezra the Mormon, (q.) 134.

F

Fairbanks, Avard, 297.
J. B., 295 *et seq.*
Fairchild, President, Explodes Spaulding Theory, 347.
Farming, Dry, 6.
Far West, 67, 71, 72.
Ferrier, John, 278.
Fewkes, Dr. J. W., (q.) 42.
Fillmore, 109.
-Fishlake Natl. Forest, 218.
Finch House, 248.

Fire Fighting in Natl. Forests, 218.
Fish and Game Dept, 231.
Hatchery, State, 232.
Lake, 230.
Lake Natl. Forest, 230.
Flagstaff Mine, 207.
Flickers, 247, 248.
Florence, Neb., 101, 105.
Floyd, Camp, 116.
Fly Catchers, 248.
Folsom, W. H., 137, 313.
Forbes-Robertson, 145.
Ford, Gov., 75, 76, 77.
Forest Experiment Station, 223.
FORESTS, NATIONAL, OF UTAH, 216-234.
Mountains in, 217.
FOREWORD, v.
Fort Douglas, 274.
Founder of Mormonism, 280.
Freedom to Worship, v.
Fremont River, 5.

G

Gallatin, Mo., 69.
Garden City, 224.
Garfield Smelters, 213.
Gemini Mine, 208.
GENERAL GLIMPSES OF THE LAND, 1-30.
Gentiles, Influence of, x.
Murdered, 117.
GEOLOGY OF UTAH, 155-168.
Grand Canyon District, 273.
Henry Mts., 272.
High Plateaus of Utah, (q.) 23, 272.
Uinta Mtns., 271.
Gilbert, G. K., 155, 156, 163, 272, 273.
Gibbon, T. E., 325.
Gila Monster, 178.
Glaciation of Uinta and Wasatch Mtns., 158.
God Like Man, 350.
Golden Plates, 51.
Gold Finch, 251.
Goose, Canada, 258.
Cackling, 258.
Wild Snow, 258.
Grand Canyon of Colorado, 272-3.
River, 5, 27, 28, 29, 35.
Grant, Pres. Heber J., 332.
Gray Cliff, 165.
Grazing in Natl. Forests, 222.
Great Basin, 2, 3, 6, 24, 155.
Salt Lake, 2, 3, 5, 7, 253, 273, 285.
Desert, 2, 250.
Trail, 281.
Green River, 5, 27, 28, 29, 31.
Grey, Zane, 22, 235, 236, 279.
Grouse, Dusky, 252.
Ruffled, 252.
Sage, 252.
Grow, Henry, 313.
Gull, Sea, 258.
Gun-Grabbing Johnny, (q.) 263.

H

Hachberry Canyon Ruins, 41.
Hadley, Albert Whipple, 285.
Mormon Rhymes, 287.
Hamblin, Jacob, 171.
Hammond, Scout Executive, 261.
Handcart Brigade, 103 *et seq.*
Harris, Martin, 51, 68.
Harte, Bret, 324.
Hat Island, 253 *et seq.*
Hatchery, State Fish, 232.
Haun's Mill, 71.
Hayden, F. V., 22.
Peak, 230.
Surveys, 271.
Hawks, Marsh, 247.
Sparrow, 247.
Western Red-Tailed, 247.
Henry Mtns., 162.
Heritage of the Desert, (q.) 22.
Heron, Blue, 258.
Higbee, Elias, 72.
Highland Boy Mine, 211.
High Priest, 329 *et seq.*
Hill, Thos., 288.
Hilliers, Mt., 164.
Hiram, 53.
History of Utah, Dramatic, v.
Holden, Bert, 208, 209.
Holmes, Mt., 164.
Horsley, Harry, 139.
Horseshoe House, 41.
Hotel Utah, 309, 318.
House Finch, 240.
Rock Valley, 165.
Wren, 248.

House of Shame, 279.
Hovenweap Ruins, 40, 41, 42.
Howe, E. D., 346.
Humming Birds, 248.
Hurlburt, Dr. P., 346.
Hurricane Ledge, 165.
Hyde, Orson, 332.
Hydro-Electric Development, 7, 223.
Hymns, Mormon, 65.
Hyrum Smith, 77.

I

Illiteracy in Utah, 154.
Indian War, 109.
INFLUENCE OF UTAH UPON LITERATURE, 269-287.
Inman, Col. Henry, 281.
IRRIGATION AND THE MORMONS, 195-205, 6.
Investigations in Utah, 201 *et seq.*
Island Antelope, 12, 283.
Islands of Salt Lake, 283.
Ivins, Anthony W., Pres., 332.

J

Jackling, D. C., 211.
Jackson County, 54.
Jacob's Pool, 165.
Jays, Long Crested, 248.
Rocky Mountain, 248.
Woodhouse, 248.
Jensen, W. F., 293.
Jordan River, 5, 250.
Jorgensen, Chris., 288.
Journey to Great Salt Lake, 273.
Judd, Neil M., 43.
Juncos, 247.

K

Kaibab Plateau, 233.
Kaiparowits Plateau, 4.
Kamas Prairie, 4.
Katchina Bridge, 239.
Kanab, 24.
Kane, Thos. L., 114.
Keith, Wm., 288.
Keys of the Priesthood, 331 *et seq.*
Kidder, Alfred V., 35, 36.
Kimball, Ed. P., 315.
Heber C., 91, 332.
Mrs., 126-7.
Kingbirds, 248.
King's Peaks, 227.
Kirkham, Reuben, 295.
Kirtland, 58, 64, 68, 69, 91.
Temple, 65.
Kiskadden, Mrs. Asenath, 143.
Kivas, 37.
Knapp, Geo. L., (q.) 84, 92.

L

Labyrinth Canyon, 35.
Creek, 29.
Laccolites, 164, 272.
Lagoon, 321.
Lambdin, Wm., 346.
Lambourne, Alfred, 140.
Land Classified in Natl. Forests, 222.
Lands of the Arid Region, 272.
Lark, Desert Horned, 249.
La Sal National Forest, 218.
Leavitt M. B., (q.) 137.
Lee, John D., 115, 277.
Lehi, 109.
Liberty Jail, Prophet in, 71.
Liberty Park, 320.
Library, Mormon, xii.
Thomson's, 323.
Lincoln, Pres., 117, 123.
Linnets, 247.
Lion House, 304, 319.
Of the Lord, 277.
LITERATURE, UTAH'S INFLUENCE ON, 269-287.
Livestock on National Forests, 221.
Logan, 224.
Valley, 5.
Long Canyon, 36.
Horace J. Discovers Bridges, 238.
Valley, 165.
Lucas, Genl. Sam. D., 71.
Ludlow, Fitz Hugh, (q.) 126.
Lund, 232.
Prof. Anthony C., 317.
Lyne, Thos. A., 138, 139.
Lynne, 109.

M

Macomb, Capt. J. N., (q) 28, 32, 271.
Magpie, Western, 248.

Majors, Wm., 294.
Maiben, Mrs.. 139.
Mammoth Cave, 232.
  Springs, 232.
Manchester, N. Y., 51.
Mancos Canyon, 31.
  Ruins, 32.
Man Like God, 350.
Manti National Forest, 218.
Manuscript Found, 346.
March from Nauvoo, v, 98 *et seq.*
Marvin, Mt., 231.
Marriage, Celestial, 350.
  Plural, 120.
Martial Law Declared, 112.
Marryat, Capt., 277.
Martin, Edward, 103.
Marysvale, 325.
McChrystal, John, 209.
McClellan, J., Organist, 315.
McElmo Ruins, 32, 36.
McGuire, Don, 32.
Mead, Ellwood, (q.) 201 *et seq.*
Meadow Larks, 247, 251.
Melchisedek Priesthood, 329 *et seq.*
Memorial to Congress, 109.
Merriam, Florence B. (q.) 280.
Mesa Verde Ruins, 42.
Metaphysics of *Mormonism,* 280.
Migrations of Mormons, v.
  Wonderful, vi.
Militia, 73.
  Orders to, 113.
Millard, Charley, 139.
Millenial Star, 93.
Miller, Eleazer, 91.
  Joaquin, (q.) 249, 276.
Minard, F. H., 211.
Minindoka Forest, 218.
Mines and the Ore Deposits of Utah, 206-215.
Mining and Scientific Press, (q.) 15.
  Camps Opposed, x.
  Industry, 6.
Missions, 335.
Missionary System, Mormon, 352-357.
Missouri Mobs, 55 *et seq.*
  Mormons Move to, 54.
Mitchell, Arthur, 295.
Modern Irrigation and the Mormons, 195-205.
Mormon, Book of, 50 *et seq.,* 79, 119, 345.
  Church, Organization of, 328-342.
    A Restoration, 343.
    Not a Sect, 352.
  Belief, vi.
  Control in Politics, xi.
  Girl, 279.
  Library, 269.
  Village, My Summer in a, 280.
  Rhymes, Hadley's, 287.
Mormons, King of, 279.
  and Irrigation, 195-205.
  Driven Out, 98 *et seq.*
Mormonism, (q.) vii.
  Author's Attitude Towards, vii.
  Origin of, and Joseph Smith, 47-81, 280.
  Metaphysics of, 280.
  Unveiled, 346.
Monmouth, 73.
Monsieur Violet, 277.
Montezuma Creek, 35, 36.
Monticello, 35.
Monument Park, 289.
Monument to Pioneers, 319.
Moonlight on Weber River, 293.
Moran, Thomas, 288.
Moroni, The Angel, 51.
Morrill, Justine S., 116.
Morris. 139.
Mountain Art, 276.
  Big, 10.
  Little, 10.
  Meadows Massacre, 114.
  Of Utah, 3, 4, 217, 227, 230.
Mount Abajo, 4, 217.
  Bear River, 5, 217.
  Henry, 4.
  La Sal, 4, 29, 217.
  Navaho, 4.
  Oquirrh, 10, 13, 15.
  Timpanogos, 4.
  Wasatch, 15.
  Uinta, 15.
Mukuntuweap, 169-192.
Murder of Two Gentiles, 117.

My Summer in a Mormon Village, 280.

N

Narrows, 21.
National Forests of Utah, 216-234.
Natural Bridges of Utah, Colossal, 235-245.
National Monument, 240.
Nauvoo, 72, 73, 98.
Charter of, 75.
Exodus from, 102 *et seq.*
Seized by Enemies, 102.
Nebo, Mt., 230.
Nephi, 3, 52, 230.
Neslen, Robt., 139.
Nevada, 116.
Nightingale, Northern, 249.
Nine Mile Canyon, 31.
Nonnezoshie Boco, 241.
Northern Nightingale, 249.
Nut-hatches, 248.

O

Oberlin College Library, 348.
Observation, Training of Powers of, 266.
Office Building, L. D. S., 318.
Officials of Mormon Church, 331 *et seq.*
Ogden, 109.
River, 5.
Omaha, 101.
Ontario Mine, 207.
Opalescent Valley, The, 169-192.
Oquirrh, Mtns., 10, 12, 13, 15.
Ore Deposits of Utah, (q.) 1, 157.
Trains, 17.
Oregon Short Line, 325.
Organ, Tabernacle, 315.
Organization of the Mormon Church, 328-342.
Of City and County, Salt Lake, 108.
Origin of Mormonism and Joseph Smith, 47-81.
Orioles, 247.
Ottinger, Geo. M., 139, 294.
Out of Great Tribulation, 98-106.
Outing, (q.) 282.
Overland Guide, (q.) 21.
Pony Express, 294.
Owachomo Natural Bridge, 240.
Owls, Desert, 250.
Screech, 247, 251.
Short-Eared, 247, 251.

P

Panguitch, 193.
Lake, 232.
Paragoonah Ruins, 43.
Paria Creek, 165.
Partridge, Bishop, 56.
Parunuweap, 180.
Patriarch, 330.
Presiding, 333.
Patterson's Printing Est., 346.
Payne, Ninetta Eames, 282.
Payson, 109.
Peculiar People, vi.
Pelicans, 253 *et seq.*
Peniston Opposes Mormons, 69.
Pennell, Mt., 164.
Pennellen Pass, 164.
Penrose, Chas. W., Pres., 332.
Phelps, W. W., Hymns of, 65, 356.
Pidgin, Charles Felton, 279.
Pikyabo Natural Bridge, 243.
Pilgrim's Migration, v.
Pine Valley Mtns., 283.
Pioneer's Day, 321.
Monument, 319.
Pipe Springs, 165.
Pitt's Brass Band, 136.
Placer Mines, 214.
Plague of Crickets, 199.
Playhouse, A, 140.
Player, Recollections of a, 142.
Players at S. Lake Theater, 141.
Plateau Province, 2, 3.
Pleasant Grove, 4.
Plum, Courage of Capt., 279.
Plummer, Dr. C. G., xii, 246 *et seq.,* 253, 260-268.
Plural Marriage, Revelation on, 120.
Polygamy in Utah, 119-134, vi, 110, 116.
Forbidden, 118.
Pool of Enchantment, 306.

Powell, John Wesley, 157, 169, 195, 272.
-Sevier Natl. Forest, 218, 220.
Pottery, 39.
Pratt, Parley, 103.
President, Mormons Appeal to, 63.
Of Mormon Church, 330.
Presidency, The First, 330.
Priest, 338.
High, 330.
Priesthood, Aaronic, 329 *et seq.*, 345.
Authority of, 336.
In Mormon Church, 329, 345.
Melchizedek, 329 *et seq.*
Primary Officers of Mormon Church, 329.
Promontory Point, 324.
Prophet, 330.
Provo, 109, 226.
River, 4, 5, 226.
Putnam, Orion, 186, 299.

Q

Quail, Bob-White, 251.
California Crested, 251.
Mountain, 251.
Quincy, Ill., 72, 73, 99.
Whig, 101.
Quorum, 330 *et seq.*

R

Raft River, 6.
RAILWAYS IN UTAH, 324-327, 6, 117.
Rainbow Bridge, 241.
Trail, 235, 279.
Range in National Forests, 222.
Reclaiming the Arid West, 195.
Reid's Peak, 230.
Relf, Geo. O., 318.
Remy and Brenchley, 122, 273.
Reorganized Church of L. D. S., 279.
Revelations, 52, 345.
Given to Brigham Young, 86.
On Plural Marriage, 120.
Revelators, 330.
Rice, L. L., 347.
Richards, T. A., (q.) 15.
Willard, 78, 332.
Richfield, 231.
Riders of the Purple Sage, 279.
Rigdon, Sidney, 53, 68, 72, 95, 98, 331, 346.
Riley, L. Woodbridge, Repudiated, 280.
Rix, Julian, 288.
River, 3, 4.
Bear, 5.
Colorado, 5.
Dirty Devil, 231.
Duchesne, 229.
Fremont, 5, 231.
Grand, 5, 28.
Green, 5, 27, 28.
Jordan, 5, 250.
Ogden, 5.
Provo, 4, 5.
Raft, 6.
San Juan, 6.
Seven Mile, 231.
Sevier, 5.
Snake, 6.
Spanish Fork, 5.
Virgin, 5.
Weber, 4, 5.
Roberts, B. H., (q.) 48.
Robins, 247, 251.
Robinson Murdered, 117.
Rocky Mountain Saints, The, 281.
Rockville, 165.
Creek, 229.
Rockwell, Orrin P., 72.

S

Sage Thrasher, 250.
Grouse, 252.
Salina, 231.
Saltair, 310, 321.
SALT LAKE CITY, 4, 8, 105, 107, 215, 313-323.
Army Enters, 114.
Birds in, 247.
Great, 5, 9, 107, 269.
Islands in, 282.
Route, 232, 325 *et seq.*
THEATER, 135-145.
Tribune, 118.
San Juan Co., 32, 35.
River, 5, 29.
San Rafael Swell, 24, 160.
St. George, 26, 232.
Screech Owls, 247.

Scorup and Natural Bridges, 238.
Scribner's Magazine, (q.) 25.
SCULPTURE AND ART IN UTAH, 288-307.
Sea Gulls, 255 *et seq.*, 267.
Monument, 200, 267.
Secessions from Mormon Church, 279.
Secular Authority, 132.
Seers, 330.
Settlements, Individuality of, xii.
Seven Mile River, 231.
Seventy, Quorum of, 330 *et seq.*
Sevier National Forest, 231.
Sevier River, 5.
Shame, House of, 279.
Shipapu Natural Bridge, 239.
Shunesburg, 165.
Sierra La Sal, 29.
Simpson, Capt. J. H., 31, 270.
Siskins, Pine, 247.
Smelting in Salt Lake City, 214.
Smith, Hyrum, 77, 317.
Hyrum G., 334.
SMITH, JOSEPH AND THE ORIGIN OF MORMONISM, 47-81, vi.
Arrested, 73.
First President, 331.
How Explain, 80.
Letter to Persecuted Saints, 58.
Shot, 78.
Statue of, 317.
Joseph F., Pres., 332, 348.
Smithville, 32.
Snake River, 6.
Snow, Eliza R., 124.
Leroi C., xii.
Lorenzo, Pres., 123, 124, 332.
Social Hall, 137.
Soil, Utah's, 6.
South Pass, 27.
Sovereignty of the Church, 335.
Spanish Fork River, 5.
Sparrow, 247.
Chipping, 247, 250.
Desert, 250.
Hawk, 247.
Song, 250.
White-Crowned, 249.
Spaulding, M. S., 348.
Theory, 345.
Springs in Utah, 232.
Spiritual Wives, 280.
Springfield Republican, (q.) 7.
Stakes, 330 *et seq.*
Stansbury, (q.) 27, 269.
Star, Evening and Morning, 53.
STATE, BUILDING A, 107-118.
Steamboat Mtn., 165.
Stenhouse, T. H. B., 281.
Mrs., 282.
Stephens, Evan, 317.
Stolen Sunbeam, 275.
Stoddart, James H., 142.
Strang, James Jesse, 279.
Strawberry Reservoir, 229.
Sun Pictures of Rocky Mountains, (q.) 22.
Surouaro, 33.
Swallows, 248.

T

Tabernacle, Salt Lake, 312.
Choir, 136.
Organ, 315.
Talmage, Apostle, J. E., (q.) 131.
Taylor, John, Pres., 78, 332.
Teacher, Mormon, 338.
Tell It All, 282.
Temple Block, 311.
Kirtland, Dedicated, 65.
Salt Lake, 311.
Territory of Deseret, 109.
Utah, 110.
Tertiary History of Grand Canyon, 273.
THEATER, THE SALT LAKE, 135-145.
Thomson, S. O., Private Library, 323.
Timber, Native, 220.
Waste, 219.
Timpanogos, Mt., 4, 225.
Tintic Mine, 207 *et seq.*
Tithing System, 340.
Tobacco and the Mormons, 152.
Tomorrow's Tangle, 279.
Tommy Duck Springs, 232.
Towers, Ancient, 40, 42.
Of the Virgin, 172.
Square, 42.

Transportation, 6.
Trumbull, Mt., 233.
Tullidge's Quarterly, 276, 294.
John, 294.
Tuttle, Bishop, (q.) 128, 131, 328.
Twin Peaks, 15.

U

Uinta National Forest, 218.
Range, 3, 5, 227, 271.
Glaciation in, 158, 236.
Union Pacific Ry., 324.
Unit Type House, 42.
University of Utah, 153, 309, 310.
U. S. Smelting, Refining and Mining Co., 208-9.
UTAH, BIRD LIFE IN, 246-259.
Central Railway, 325.
Copper Co., 15, 207 *et seq.*
DESCRIPTION OF, 1-30.
GEOLOGY OF, 155-168.
Illiteracy in, 154.
Made a Territory, 110.
Museum, 45.
RAILWAYS IN, 324-327.
Timber, 220.
Valley, 229.
War, 111.
Utah's Attractions, ix.
Climate, ix, 6.
EDUCATIONAL SYSTEM, 146-154.
INFLUENCE ON LITERATURE, 269-287.
MINES AND ORE DEPOSITS, 206-215.
Transportation, 6.
Soil, 6.

V

Valley, San Pete, 6.
Sevier, 6.
Utah, 229.
Valleys, Blossoming, x.
Van Buren, Pres., Appealed to, 72.
Van Vliet, Capt, 112.
Vermillion Cliffs, 165.
Virgen Rio (same as Virgin).
Virgin River, 5, 165, 190, 234.
Towers of, 172.
Vision, Joseph Smith's, 49, 317.
Vulture, 250.

W

Walker Bros., 294.
Wall, Col. Enos A., 210.
Wandamere, 321.
Warblers, Audubon, 248.
Yellow, 248.
Ward, 334.
Bishops, 338.
Ward, George, 304.
Warren, Major, 101.
Wasatch Natl. Forest, 218, 225.
Range, 3, 4, 5, 15, 228.
Glaciation in, 158.
Water Power, 7, 222, 225.
Weber Canyon, 21, 168.
River, 4, 5,
River, Moonlight on, 293.
Weggeland, Daniel A., 294.
Western Pacific Ry., 325.
WESTERN PHYSICIAN-NATURALIST, A, 260-268.
Wheeler Survey, 43, 156, 271.
Whitingham, Vermont, 91.
White Canyon, 238 *et seq.*
Whitmer, David, 68.
Whitney, Horace G., 138.
Orson F., (q.) 206.
Widtsoe, John, Dr., 6, 153.
Williams, Fredk. G., 332.
Willie, James G., 103.
Wilson, Harry Leon, 277.
Winter Quarters, 101 *et seq.*
Wire in Zion Canyon, 186.
Wonderland of the Wild West, 275.
Woodpeckers, 248.
Woodruff, Wilford, Pres., 332.
Manifest against Polygamy, 118, 129.
Word of Wisdom, 80.
Wren, House, 248.
Wylie's Camp in Zion Natl. Park, 185.

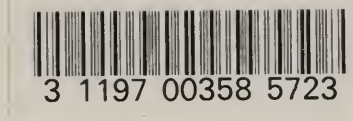
Y

Yard, Robt. Sterling, (q.) 175, 177.
Yarrow, Dr. H. C., 43.
Yellow Jacket Ruins, 36, 41, 42.

YOUNG, BRIGHAM, RELIGIONIST AND STATESMAN, 82-97, vi.
And His Mormon Empire, (q.) 84.
Born, Whitingham, Vt., 91.
And Education, 146.
And Irrigation, 197.
Conflict with S. Rigdon, 95.
Guidance of Settlers, xii.
His One Revelation, 86.
In Charge of Exodus, 101.
In Literature, 277.
Lieut.-Genl. of Militia, 101.
Made President, 332.
Missionary in England, 93.
Opposed to Mining Camps, x, 206.
Prophecy Concerning, 95.
Rebukes Brocchus, 110.
Levi Edgar, Prof., 43.
Mahonri, M., 200, 267, 304, 317.

Z

Zion, City of, 53.
Land of, vi, 350.
NATIONAL PARK, 165, 169-192.
Z. C. M. I., 119, 320.
Zion's Camp, 64, 92.


3 1197 00358 5723

DATE DUE

AUG 2 2 1979
MAY 2 DEC 1 9
MAR 2 7 APR 1 8 1992
APR 0 3 1992
JUN 1 9 1989
JUN 0 8
APR 2 2 1993
MAR
MAY 3 1 1993
MAY 3 1 1993
MAY 1 0 1991
MAR 2 1 1994
MAY 2 9 1991
MAY 2 7 1991
NOV 0 8
NOV 1 5 1991
FEB 1
AUG 0 5 1987

297